The impact of new technologies on coordination and information management in crisis

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The unique and crucial Role of ICTs in Preventing, Responding to and Recovering from Conflict or any humanitarian disaster (WSIS Tunis, UN ICT Task Force, 2005)
The ICT4Peace Foundation

The ICT4Peace Foundation aims to enhance the performance of the International community in crisis management through the use of ICTs that facilitates improved, effective and sustained communication between peoples, communities and stakeholders involved in conflict prevention, mediation and peace building through better understanding of and enhanced application of Information Communications Technology (ICT) including Media and Social Media.

ICT4Peace aims to facilitate a holistic, cohesive and collaborative mechanisms directly in line with Paragraph 36 of the World Summit on the Information Society (WSIS) Tunis Declaration (2005):

“36. We value the potential of ICTs to promote peace and to prevent conflict which, inter alia, negatively affects achieving development goals. ICTs can be used for identifying conflict situations through early-warning systems preventing conflicts, promoting their peaceful resolution, supporting humanitarian action, including protection of civilians in armed conflicts, facilitating peacekeeping missions, and assisting post conflict peace-building and reconstruction.” between peoples, communities and stakeholders involved in crisis management, humanitarian aid and peacebuilding.
asking the right questions

- How can we harness, coordinate, and utilize the sometimes overwhelming amount of information available?

- What systems and mechanisms need to be put in place to ensure effective early-warning is given, action taken and accountability ensured?

- How does the humanitarian sector work effectively with local communities at risk once early-warning has been sounded, or disaster occurs?
what’s new?

- Ubiquity of two way communications
- Proliferation of web, internet and mobile tools, systems, platforms and services
- First indications now directly come from peoples, who are the first and key witnesses
- Disintermediated communication, where stories & information can by-pass traditional censorship mechanisms and firewalls
- Multiplicity of stories, reports, accounts
- It’s still risky, hard work on the ground by the international community, but decisions are increasingly influenced by information coming from a range of new sources, including directly from victims and peoples at risk
New ICTs for shared situational awareness

1. Twitter (micro-blogging)
2. RSS (e.g. Google News Reader)
3. Mobiles (SMS)
4. GPS (real time location data)
5. Crowdsourcing (Ushahidi)
7. VoIP (e.g. Skype)
8. Social networking (e.g. Facebook)
bearing witness and communicating
Barriers to and financial costs have fallen drastically

Event / Issue
  \[ a \text{ priori} \]
  \[ a \text{ posteriori} \]

UN system
  Government

Victims Witnesses

Mainstream media

Citizen media

International Community
### Information breakdown in crisis situation

#### New media
- Twitter
- Flickr
- Blogs
- SMS / MMS / Mobiles
- Social networks

#### Mainstream media
- CNN / BBC / Al Jazeera
- Local / National TV and radio
- Print media (mainstream / regional)
- Alternative print media

#### UN intelligence
- Sit reps
- Humanitarian Information Centres
- Agency databases / email lists
- Personal contacts / relationships

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[ICT for peace foundation](#)
Situational awareness in crisis
Welcome to the ICT4Peace inventorisation wiki

ICT4Peace aims to enhance the performance of the international community in crisis management through the application of Information and Communication Technology (ICT) – technologies that can facilitate effective and sustained communication between peoples, communities and stakeholders involved in crisis management, humanitarian aid and peacebuilding. Crisis management is defined, for the purposes of this process, as civilian and/or military intervention in a crisis that may be a violent or non-violent with the intention of preventing a further escalation of the crisis and facilitating its resolution. This definition covers peace mediation, peace-keeping and peace-building activities of the international community. In bridging the fragmentation between various organisations and activities during different crisis phases, ICT4Peace aims to facilitate a holistic, cohesive and collaborative mechanisms directly in line with Paragraph 36 of the WSIS Tunis Commitment. For more information on ICT4Peace, please read this page.

The ICT4Peace Foundation through this wiki catalogues existing ICT tools and mechanisms – operational, legal and conceptual – geared towards conflict early warning, mitigation, transformation and post-conflict recovery. The inventory will include initiatives identified by the report on ICT4Peace by the ICT4Peace Foundation published in 2005, along with more recent examples from around the world in the use of ICT for conflict mitigation using PCs, mobile phones, the web and the Internet. This wiki will be constantly updated with new information and will be maintained by the ICT4Peace Foundation.
Haiti Earthquake – January 2010

On January 12, 2010, a 7.0 magnitude earthquake struck Haiti. The ICT4Peace Foundation presents the following resources as those that contain, or in turn point to, resources including datasets, emergency numbers, helplines and updates, vital to aid efforts.

Begun as a group email and migrated to this wiki on 13 January 2010, this is a curated list compiled and maintained by Sanjana Hattotuwa, Special Advisor, ICT4Peace Foundation. A podcast featuring Sanjana’s views on the use of technology in aid efforts in Haiti by UN OCHA’s IRIN news service can be downloaded as a MP3 here.

In April 2010, the Foundation published *Haiti and Beyond: Getting it Right in Crisis Information Management*, which is now on this wiki along with the feedback we received.

*From the New York Times, 23 January 2010:* The United Nations says Haiti’s government has declared the search and rescue phase for survivors of the earthquake over. The Office for the Coordination of Humanitarian Affairs says 132 people were pulled from the rubble alive by international search and rescue teams.

Information from the ground / Haiti

**Master Contact List**

UN OCHA published a master contact list on 23 January 2010 for Haiti. It is available for download from the OCHA OneResponse website here. For greater efficiency and effectiveness, the Foundation migrated the information contained in the original Excel spreadsheet online,

1. [Primary Contacts in Haiti](#)
2. [Cluster Leads](#)
3. [IM Focal Points](#)
4. [OSOCC – MINUSTAH Base / OCHA – UNDAC team list](#)

Background information on Haiti
ict4peace foundation

crisis information wikis

- Wikis created in 2010 for Haiti earthquake, Chile earthquake, Gulf Oil Spill, Kyrgyzstan humanitarian crisis, Pakistan floods,

- In March 2011, at the request of Standby Volunteer Task Force, wiki created for Libya Uprising.

- In general all the wikis contain,
  
  - Comprehensive curated list of crisis information
  
  - UN OCHA situation reports, comprehensive briefing kits from Reliefweb, ETC sit reps and other vital information
  
  - Key background documents
  
  - Curated links to Twitter feeds, Facebook groups, Flickr photos and other social media sites
  
  - Comprehensive list of mapping resources from Google and other sources
  
  - Google Translate based translations of key vernacular resources including media
  
  - Converting Office 2011 docs to Google Docs (e.g. 3W information)
ICT4Peace Wiki on Libya

2011 Libyan Uprising

(last edited by Sanjana Hattotuwa 1 day, 23 hours ago)
Ushahidi
http://www.ushahidi.com
Crowdsourcing - Analysis Tool but information overload
Tanzania Elections Ushahidi Uchoguzi
Submitting a report with Matrix: Information Reliability

Optional Information

First Name

Last Name

Email

Source Reliability

Select One

- Yes, the source has direct access to information (witness or actor)
- Yes, the source has access to information, but can be wrong
- Yes, the source has no direct access to information, but is often right
- Not always, but is often right
- No, the source has (had) no access to information
- I do not know

News source link

Video link

Upload Photos

Choose File

Submit

No file selected
Submitting a report with Matrix: Information Probability
Submitting a report with the Matrix: How the analyst can prioritize reports

Listed in:
- A: Highly Vulnerable

Qualification: 81

Key:
- Accept
- Tend To Accept
- Tend To Reject
- Reject
From OCHA Symposium 2007 to UN Stocktaking Process 2008

- Stocktaking of Crisis Information Management capabilities and capacities in the UN Secretariat, NY and key UN agencies conducted by ICT4Peace Foundation including with OCHA, WFP, DPKO, DFS, DSS, UNICEF, UNHCR, UNDP
Key findings

• Point or ‘ad hoc’ solutions were problematic / Staff transience

• Information management often inward looking – but beneficiaries and public are outside

• Information silos - Little or no interoperability between systems and agencies

• Resistance to new technologies – Information Overload

• Senior management not interested - Inadequate policies and practices of information management
From Stock-Taking to UN Crisis Information Management Strategy (CiMS)
Crisis information management strategy. The Crisis Information Management Strategy is based on the recognition that the United Nations, its Member States, constituent agencies and non-governmental organizations need to improve such information management capacity in the identification, prevention, mitigation, response and recovery of all types of crises, natural as well as man-made. The strategy will leverage and enhance this capacity and provide mechanisms to integrate and share information across the United Nations system.

The Office of Information and Communications Technology (CITO), together with the Office for the Coordination of Humanitarian Affairs (OCHA), the Department of Peacekeeping Operations and the Department of Field Support (DPKO and DFS), has worked closely with United Nations organizations such as the Office of the United Nations High Commissioner for Refugees (UNHCR), the United Nations Children’s Fund (UNICEF), the United Nations Development Programme (UNDP) and WFP and other entities such as the ICT for Peace Foundation in developing and implementing this strategy. It is envisaged that membership will be expanded to include other United Nations organizations in the near future.
The ICT4Peace Report on Cross-fertilisation of UN Common Operational Datasets and Crisismapping October 2010
Cross-fertilisation of UN Common Operational Datasets and Crisis Mapping October 2010

As defined in the IASC Guidelines Common Operational Datasets (CODs) in Disaster Preparedness and Response draft circulated to the IASC Task Force on Information Management in June 2010,

Common operational datasets are predictable, core sets of data needed to support operations and decision-making for all actors in a humanitarian response. Some of the CODs, such as data on the affected population and damage to infrastructure, will change during the different phases of the response and therefore will need to be frequently updated and maintained. Other CODs, such as rivers and village locations, are likely to remain the same throughout the response. The CODs are proactively identified and maintained prior to an emergency as part of data preparedness measures and made available by the OCHA (or pre-agreed in-country alternate) within 48 hours of a given humanitarian emergency. All CODs must meet minimum criteria for format and attribute information in accordance with national standards.
Some broad conclusions

- Despite the tremendous technological advances with ICTs it’s still about information management, i.e. how we collect, analyse, process and use accurate information effectively.

- ICTs for crisis information management is still a new and underexplored field.

- The technological advances are very fast and originate more from civil society, NGOs and volunteers than UN and Governments. The question is, how to cross-fertilize the ICT tools and IM needs and standards between these two communities.

- ICTs are only a tool, that have to be tailored to needs, roles and jobs of humanitarian actors, and not the other way around. We need to define first who the humanitarian actors and decision-makers are in the field of protection, what they do and how ICTs can help them to be more effective.
challenges for crisis mapping

• How does information visualisation really contribute to a stronger democracy?

• Do telegenics of recent revolutions take into account systemic violence? Do technologies that underpin revolutions endure?

• Open standards still lacking - collaboration is not the same as information exchange

• Context, content, creator and consumer dynamics absent from most crowd sourcing discussions. How to integrate into global volunteer base?

• Lessons from Pakistan flooding - some disasters are sexier than others

• Failing forward still absent - everyone has success stories, everyone is saving the world a map at a time

• Ground realities like PTSD, fear, anxiety, censorship that affect ICTs in war time and post-war peacebuilding still under-studied
looking forward

• Buy in from senior management in institutions vital to effectiveness and efficiency of humanitarian networks and accountability mechanisms: More funding has to go into Crisis Information Management

• Policy makers need to embrace, not resist, potential of ICTs

• Interoperability is of cardinal importance

• Better information management systems, processes (CiMS) vital to early warning, prevention, mitigation and recovery

• Need to see potential victims as those with agency, empowered by ICTs to bear witness

• Use ICTs already present in and used by local communities, without introducing those that are unsustainable over the longer-term
thank you
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