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

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DIHAD, Dubai, 28 March 2011

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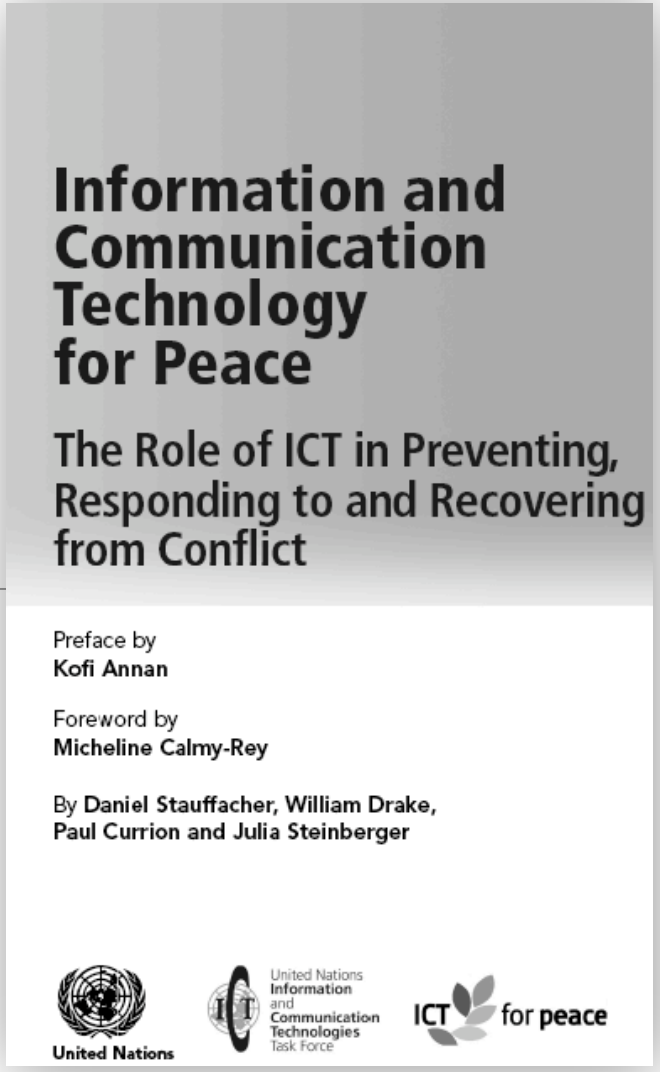
The unique and crucial Role of ICTs in Preventing, Responding to and Recovering from Conflict

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 ?

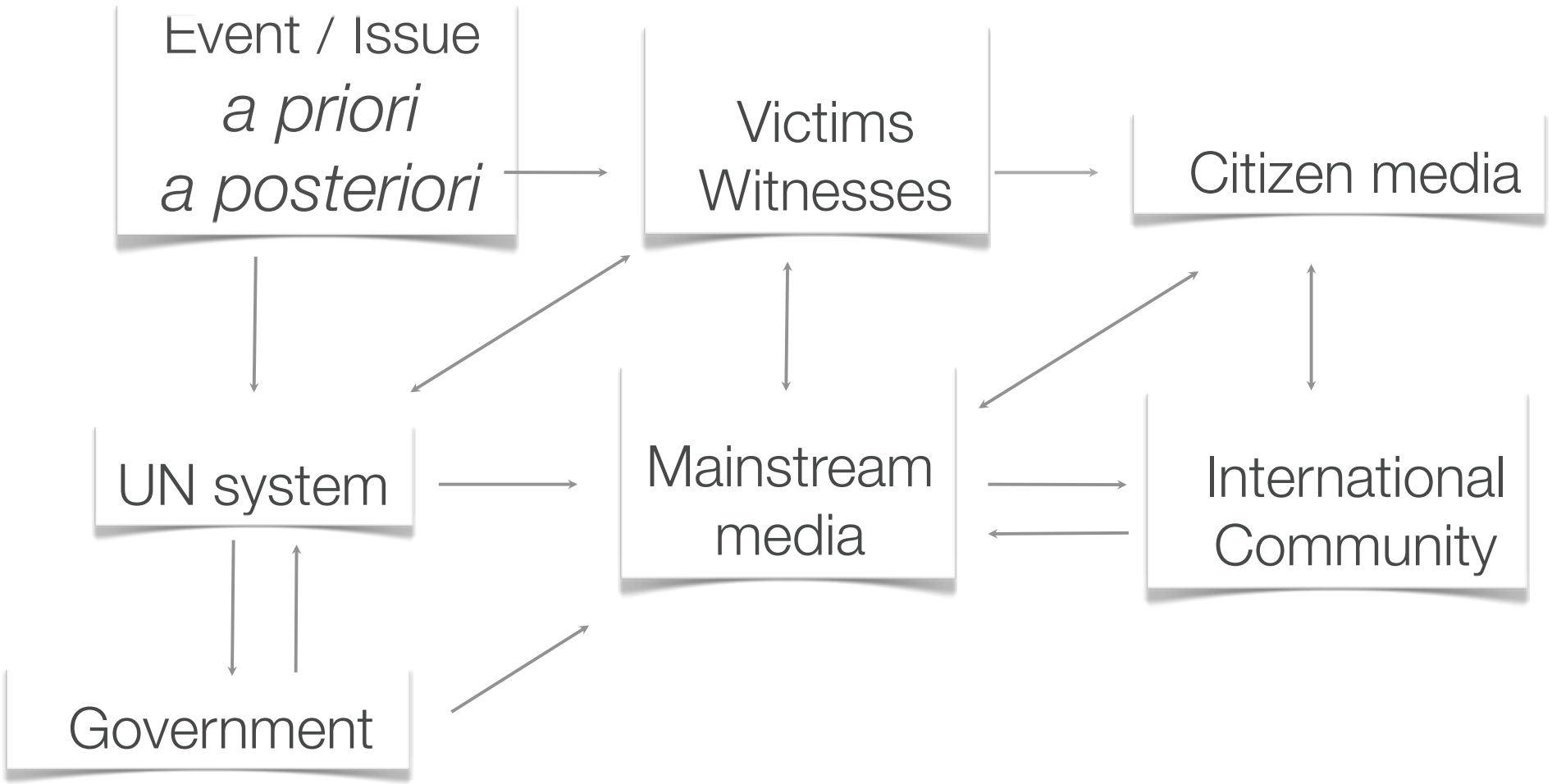
- Ubiquity of two way communications
- Proliferation of web, internet and mobile tools, systems, platforms and services
- First indications now directly come from peoples, who are the first and key witnesses
- Disintermediated communication, where stories & information can by-pass traditional censorship 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

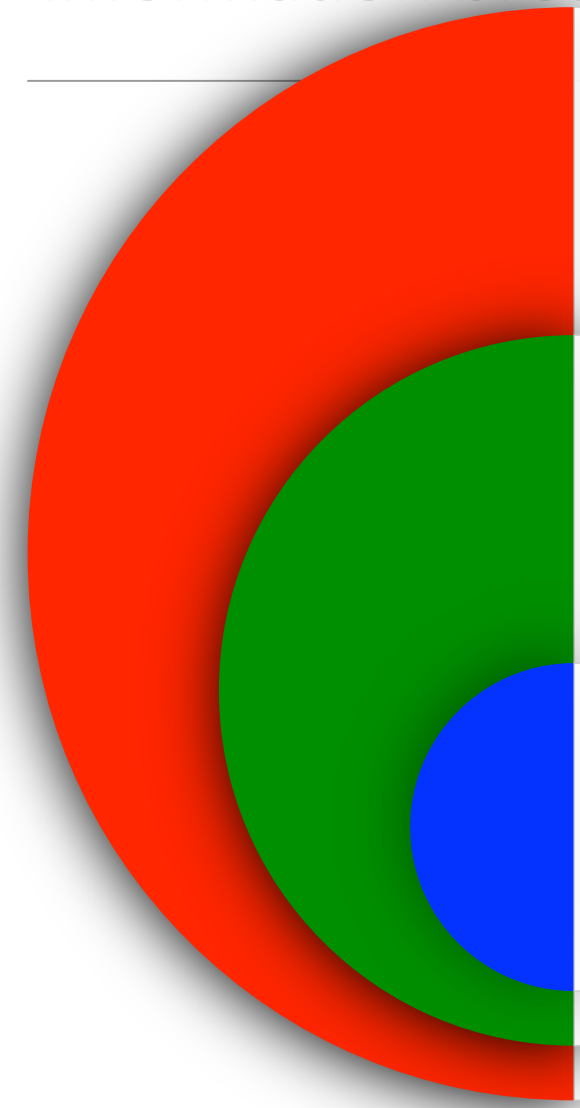
1. Twitter (micro-blogging)
2. RSS (e.g. Google News Reader)
3. Mobiles (SMS)
4. GPS (real time location data)
5. Crowdsourcing (Ushahidi)
6. Crisis Mapping (GIS – Google Maps / Google Earth, Crisis Mappers)
7. VoIP (e.g. Skype)
8. Social networking (e.g. Facebook)

bearing witness and communicating

Barriers to and financial costs have fallen drastically



Information breakdown in crisis situation



New media

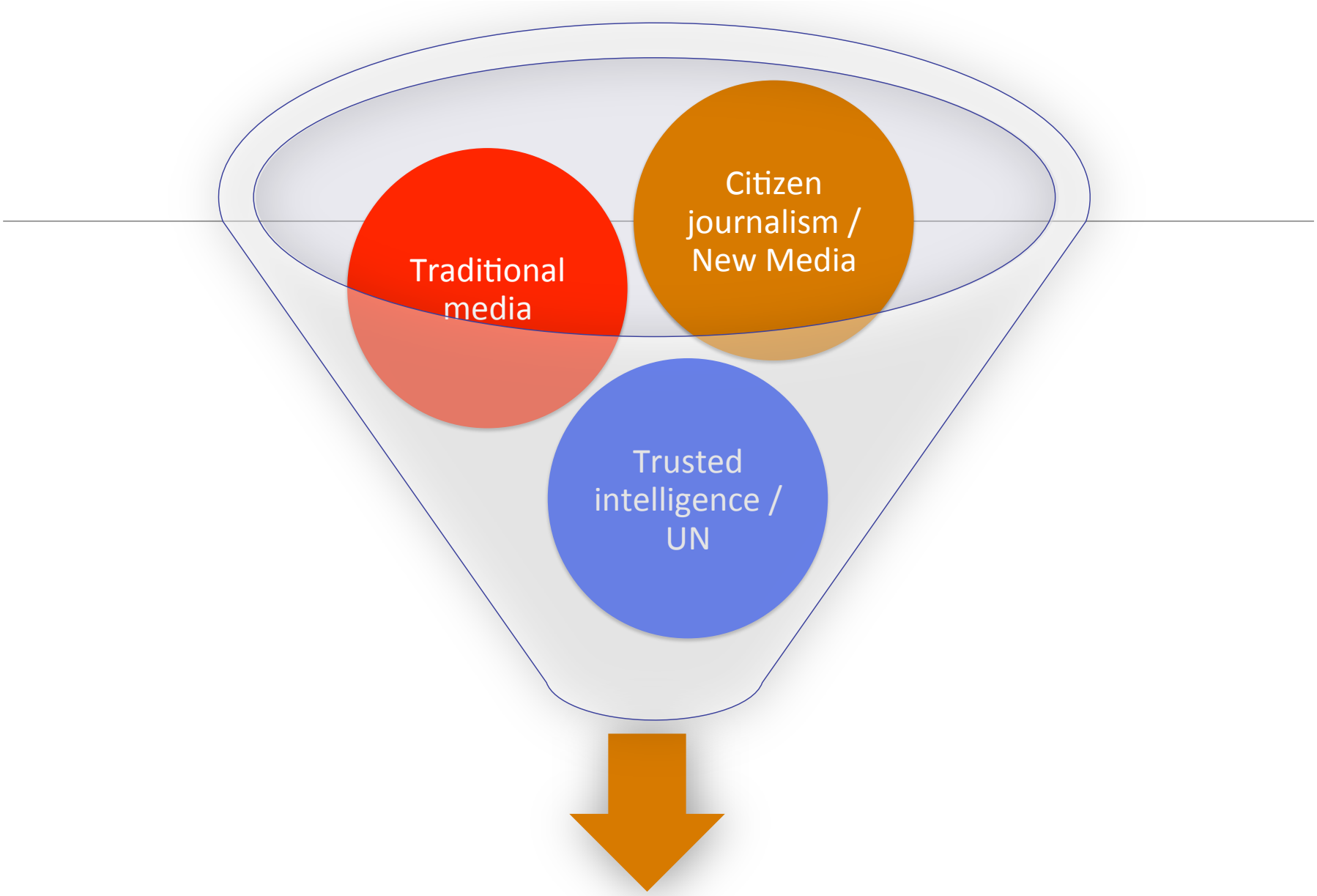
- Twitter
- Flickr
- Blogs
- SMS / MMS / Mobiles
- Social networks

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



Situational awareness in crisis

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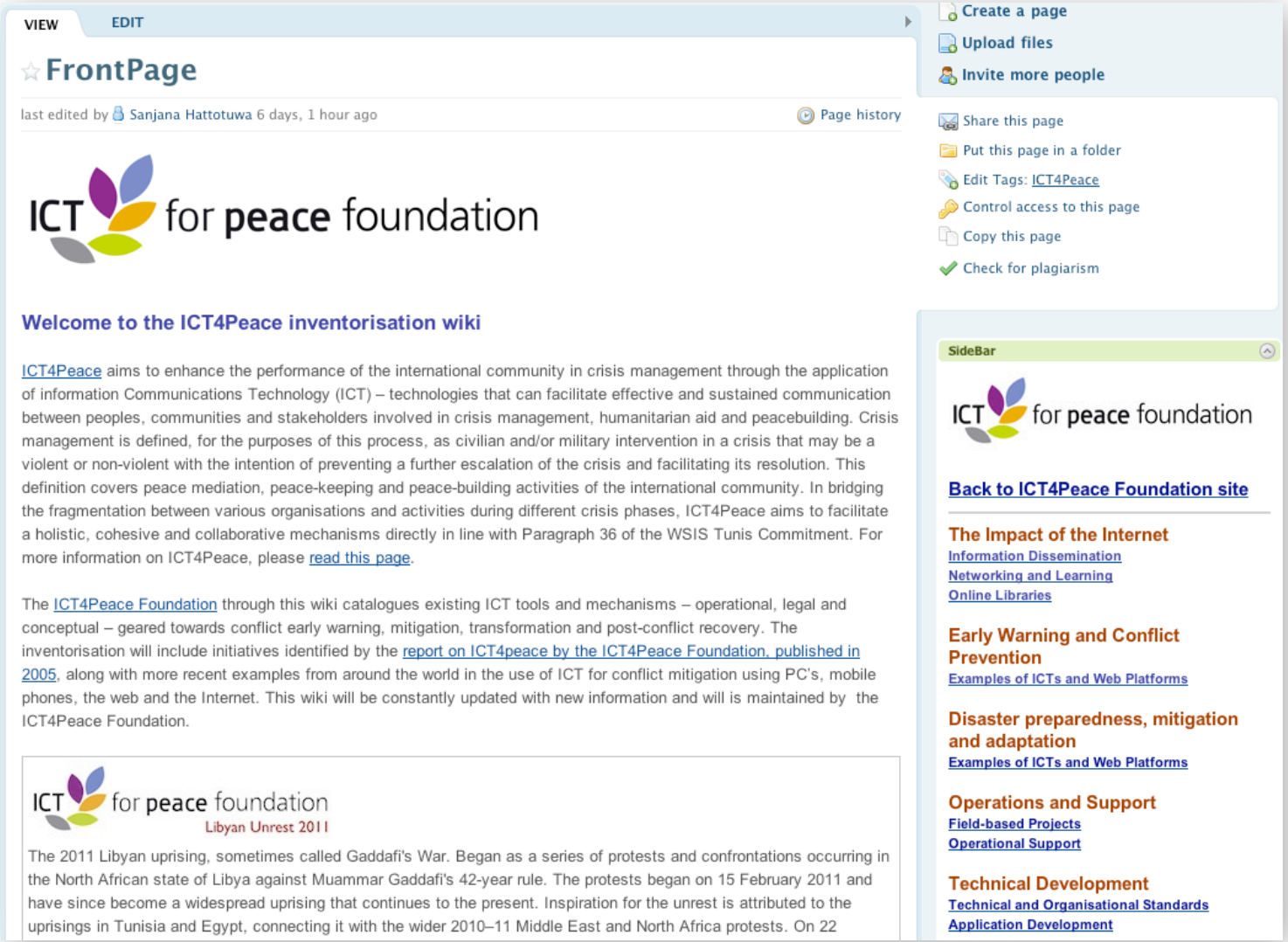
crisis information wikis



Haiti Earthquake – January 2010

last edited by Sanjana Hattotuwa 8 months, 1 week ago | Page history

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

SideBar

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Back to ICT4Peace Foundation site

The Impact of the Internet
Information Dissemination
Networking and Learning
Online Libraries

Early Warning and Conflict Prevention
Examples of ICTs and Web Platforms

Disaster preparedness, mitigation and adaptation
Examples of ICTs and Web Platforms

Operations and Support
Field-based Projects
Operational Support

Technical Development
Technical and Organisational Standards
Application Development

Post-Conflict Reconstruction
General Resources
Role of the Media
Citizen Journalism
Accountability, Justice and Reconciliation Processes

Crisis Information Management Wikis and Case studies

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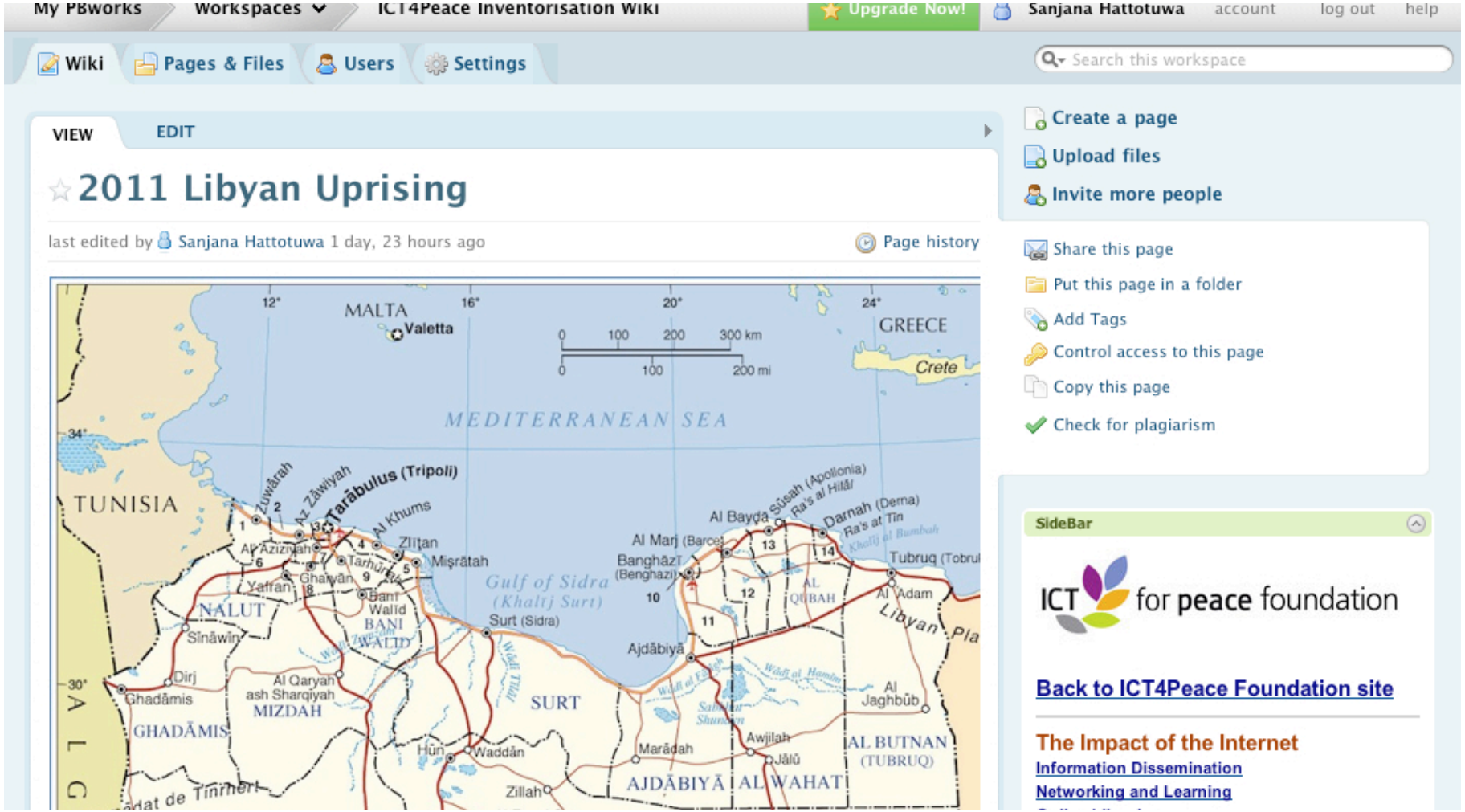
crisis information wikis

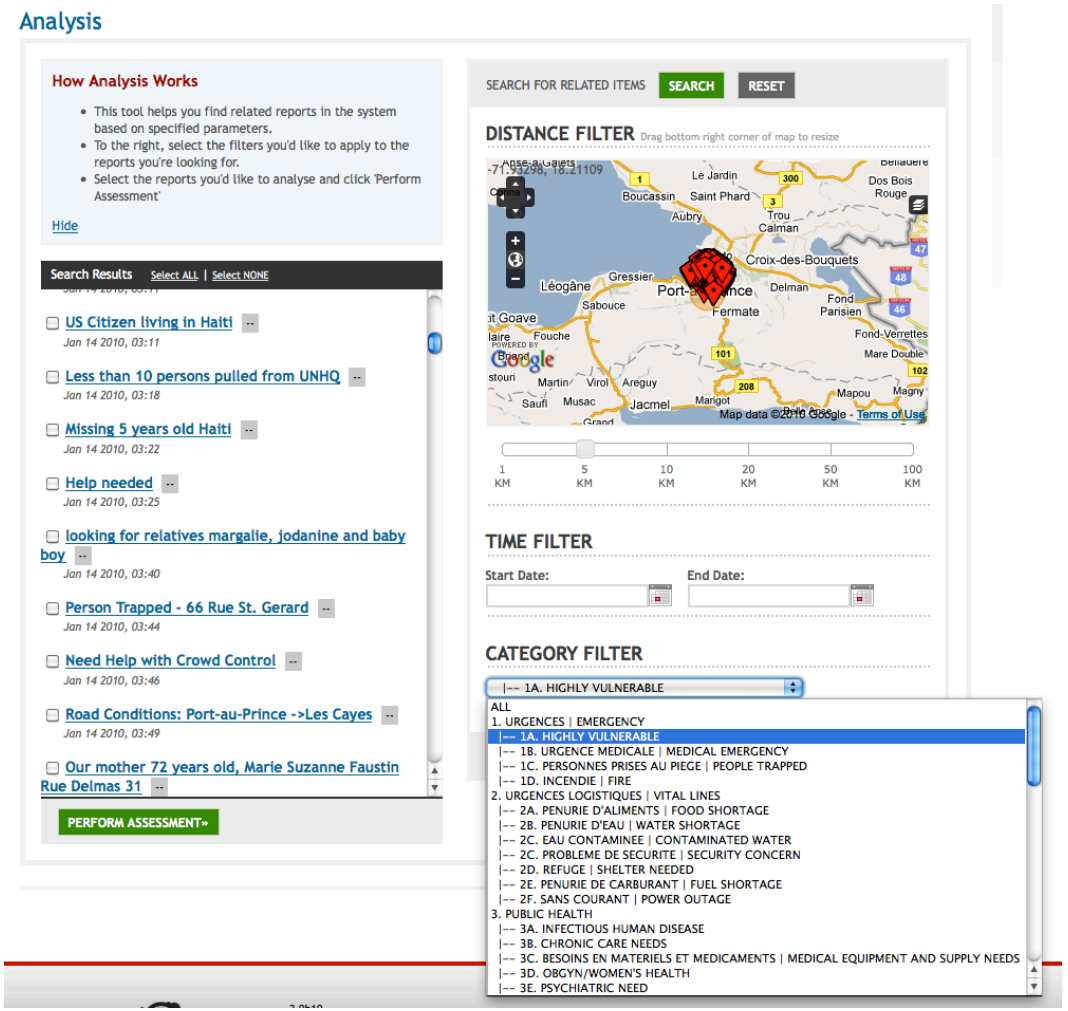
- **Wikis created in 2010 for Haiti earthquake, Chile earthquake, Gulf Oil Spill, Kyrgyzstan humanitarian crisis, Pakistan floods,**
- **In March 2011, at the request of Standby Volunteer Task Force, wiki created for Libya Uprising.**
- **In general all the wikis contain,**
    - **Comprehensive curated 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

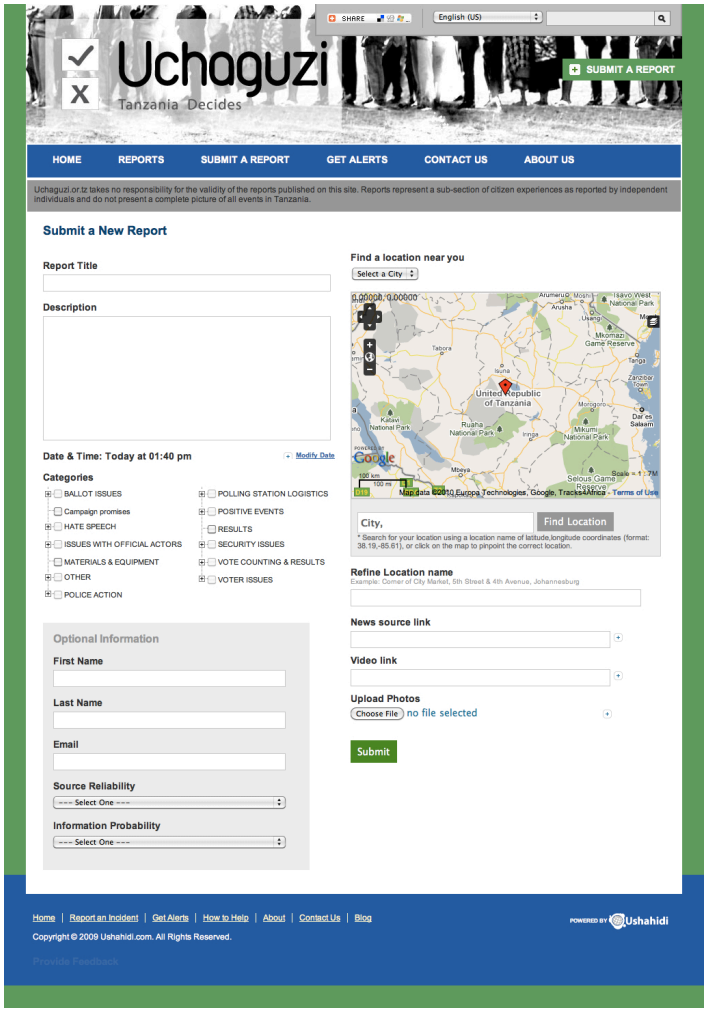


Ushahidi
http://www.ushahidi.com

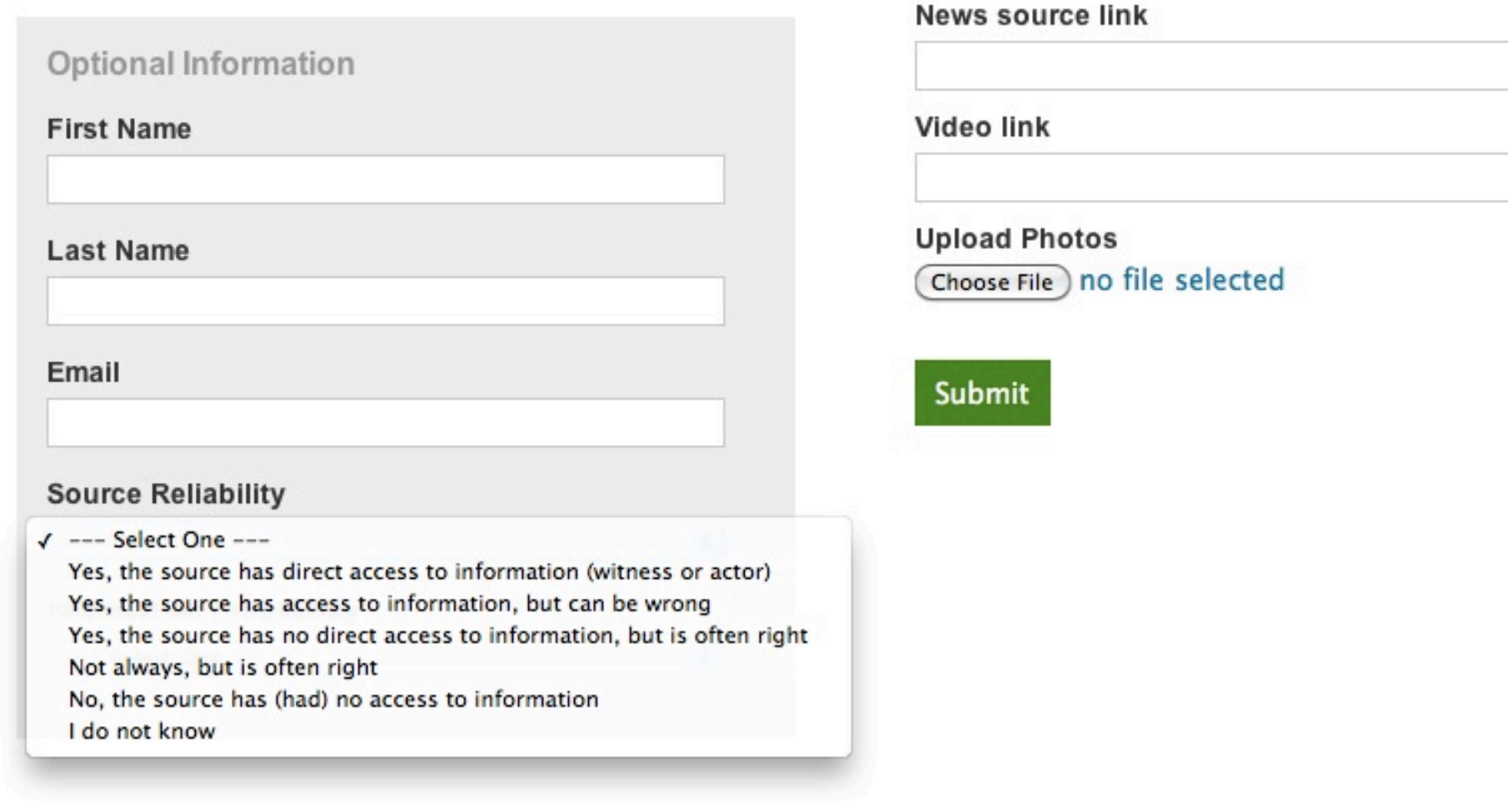
Crowdsourcing - Analysis Tool but information overload



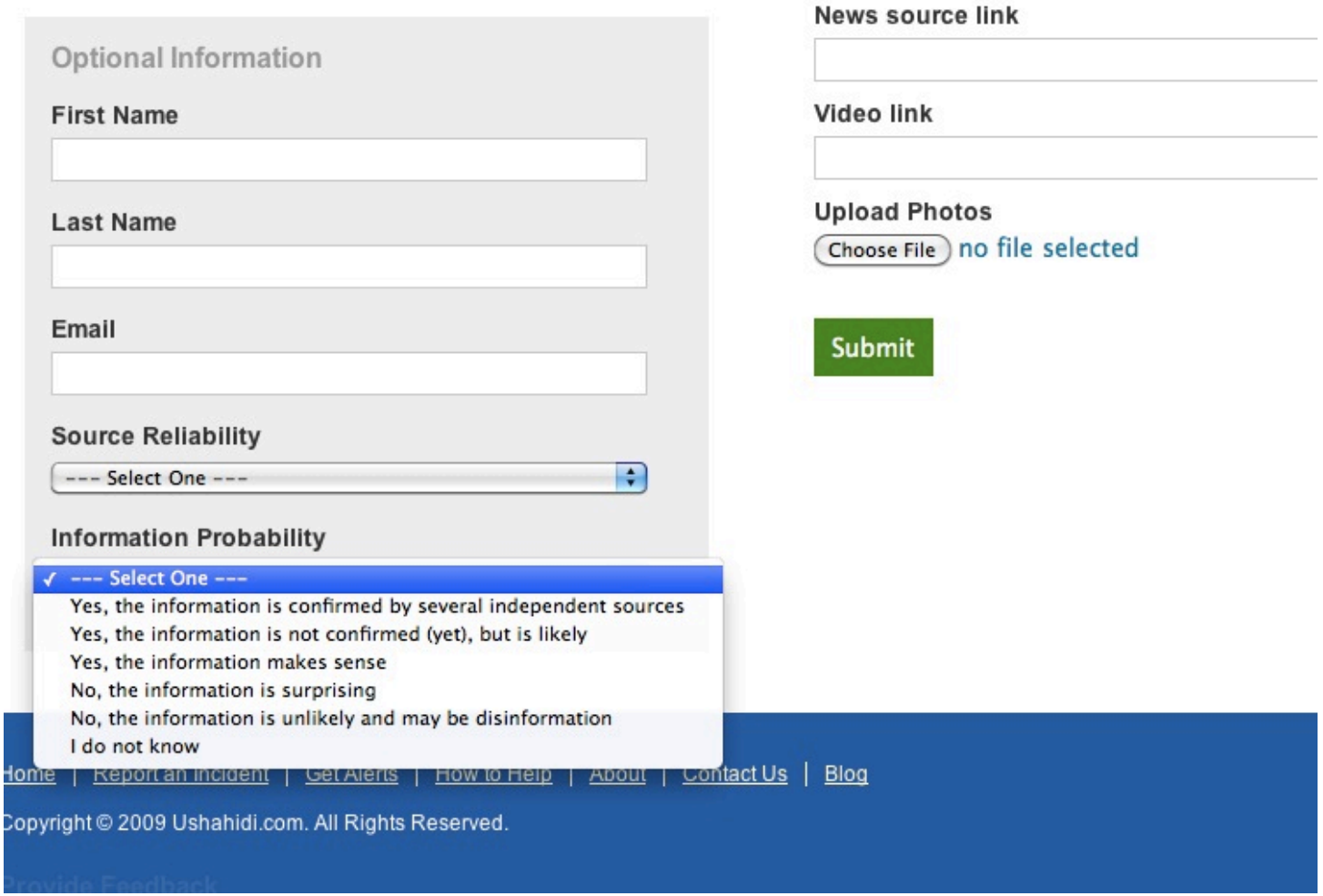
Tanzania Elections Ushahidi Uchoguzi



Submitting a report with Matrix: Information Reliability



Submitting a report with Matrix: Information Probability

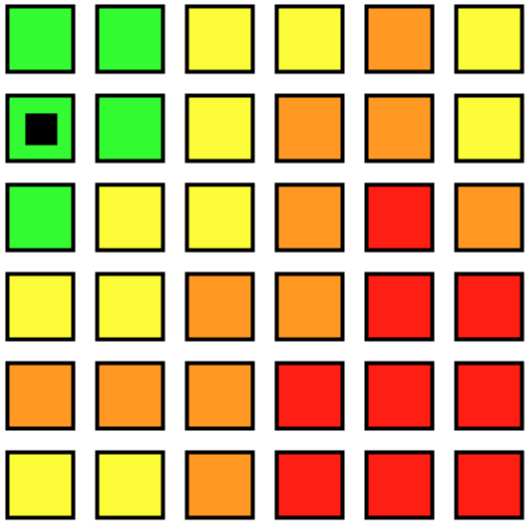


Submitting a report with the Matrix: How the analyst can prioritize reports

LISTED IN:

- 1A. HIGHLY VULNERABLE

QUALIFICATION: B1



KEY:

- Accept
- Tend To Accept
- Tend To Reject
- Reject

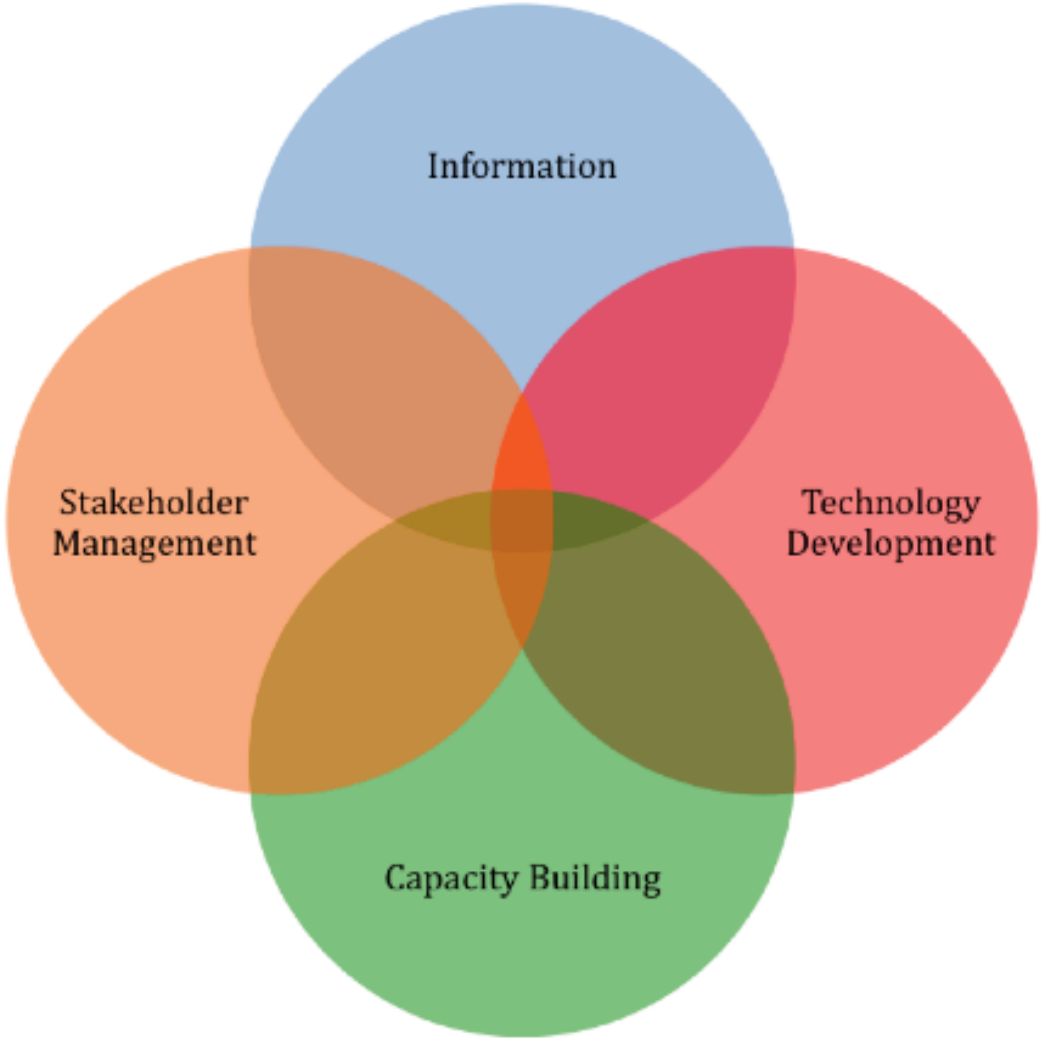
From OCHA Symposium 2007 to UN Stocktaking Process 2008

- 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)

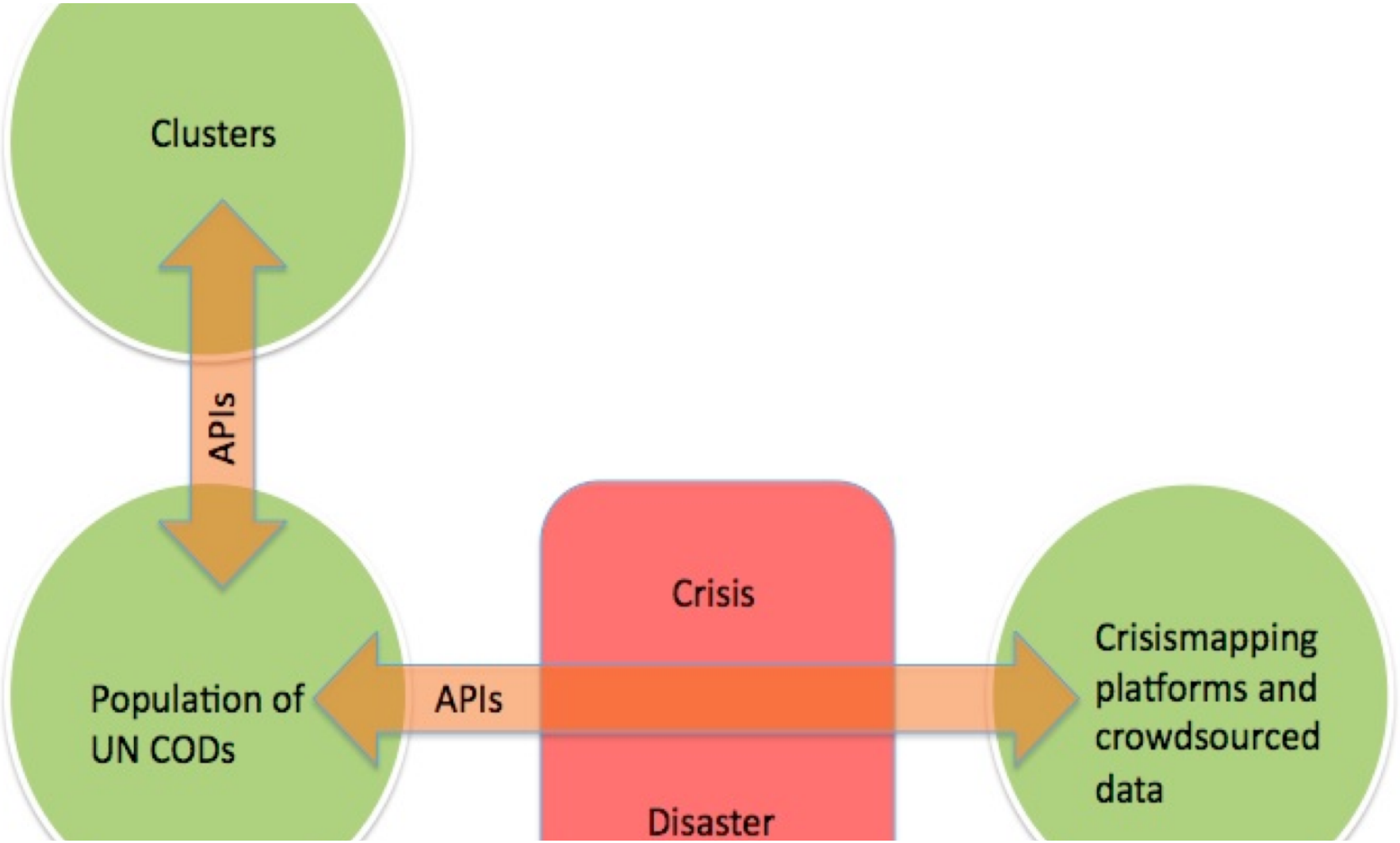


Report of the UN Secretary-General A/65/491)
Status of implementation of the information and communications technology strategy for the United Nations Secretariat.

- ***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 Suppor (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 Crisismapping 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.

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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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