

Information Sharing for Peace Support and Humanitarian Assistance Operations

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ABSTRACT

This paper discusses the need for an effective information-sharing mechanism for peace support and humanitarian operations. Such a mechanism would be of benefit to the military, international organizations and non-governmental organizations in helping them to achieve their goals as well as improve their efforts collectively. Though all three have developed information-sharing networks which are described here, these efforts must be built upon, since there is still an information gap among the different entities participating in different sectors of these operations. The final section of the paper discusses what elements an effective information-sharing mechanism must incorporate.

INTRODUCTION

Over the past decade, the size and number of complex emergency operations has increased.¹ Because of this increase, the international community has had the opportunity to learn several lessons, one of the most important of which is the need for better coordination and cooperation among those intervening in a complex emergency. The decision making criteria for whether or not the international community, embodied by the United Nations, intervenes in a complex emergency has become less strategic, though certainly not de-politicized, more based on other criteria and increasingly based on need. States have realized that the old paradigm of merely protecting strict, strategic national interests is antiquated in the post-Cold War era. Civil-Military Operations Centers (CMOC) and Humanitarian Operations Centers (HOC) have evolved and become invaluable in facilitating communication between the military and civilian organizations as well as among the civilians themselves. One weakness

¹ Complex emergency operations are defined broadly as all peace support and humanitarian assistance operations.

of these efforts, however, is that they do not have a systematic way of gathering and disseminating information to all levels of an operation. As Dr. Charles Jefferson of the US State Department notes, “[n]o single donor can rescue a failing state, so the international community has no choice but to work together” (Jefferson, 1998). The military, IOs and NGOs find themselves in a symbiotic relationship when participating in these operations, and therefore, it is becoming more and more important for them to facilitate coordination and cooperation through information sharing.

The idea of information sharing to support complex emergency operations has been gaining favor for a number of years, but only recently has the technology become advanced, inexpensive and widespread enough to make it feasible. For an information-sharing mechanism to be useful it must be easy to use and universally accessible, though there may be some restrictions on the releasability of some of the information. The omnipresence of the internet and the ever-increasing use of geographic information systems to analyze data, have turned the idea of creating a information-sharing mechanism for complex emergencies into a reality. This paper aims to clarify further why information sharing is valuable to all those involved in complex emergencies. It will then discuss current and past efforts at information sharing, their successes and weaknesses and what can be learned from them. Finally, the discussion will turn to the prospects for the development of an information-sharing mechanism which can promote advance planning and facilitate the coordination of field operations.

INFORMATION SHARING

WHY SHARE INFORMATION?

Complex emergency operations are frequently beleaguered by poor coordination and cooperation often resulting from lack of information. As Maxx Dilley notes, when collecting information in an effected region “[s]ome areas are never visited. Others are visited once and never visited again. Or, the same village may be assessed repeatedly (particularly along the main roads) to the point of potentially endangering the lives of the next assessment team!” because the people become frustrated by continually being assessed without receiving aid and/or seeing progress (Dilley, 1999). An information-sharing mechanism linking the organizations conducting these assessments could alleviate such problems by promoting unity of effort.

Information sharing in planning for and during a complex emergency can result in “improved coordination of sectoral activities, increased accountability, improved program efficiency and support for a transition from relief activities to reconstruction and rehabilitation” (Dilley and Smith, 1999). Organizations would know what information has already been collected and where there is a dearth. This knowledge would increase efficiency and promote coordination among collecting organizations. Relief providers would also know where supplies have been distributed and what areas have yet to receive any, resulting in better allocation of relief resources. In general the coordination of the assessment process and sharing the results is vital because, “grasping the totality of a complex emergency requires more information and understanding than most organizations can gather and analyze alone” (Jefferson, 1998).

THE MILITARY

A substantial obstacle the military often faces when the prospect of information sharing arises is releasability. In discussing the creation of an information-sharing mechanism, it is important to clarify that not all information can and/or should be shared. The military generally has the onerous responsibility of establishing and maintaining security during a complex emergency and would never want to do anything to compromise its ability to accomplish this mission. That having been said, the US military, in particular, has become notorious for restricting the release of information. During the spontaneous repatriation of refugees in Kosovo, those in the humanitarian community attempting to help became aware that unexploded ordinance could endanger these people. The US military was reluctant to release this information and stalled until the pressure from the humanitarian community forced it to release it or suffer a public relations embarrassment. Not only does not releasing information like this endanger the lives of civilians needlessly, it also causes the humanitarian community to distrust the military and makes them less likely to cooperate with it in the future. Though, understandably, much information obtained by the military is sensitive and can not be shared, there is often a wealth of information which should be releasable and could be of great benefit to the humanitarian community.

The military can also benefit from information provided by others in the international community. Knowing exactly where different aid organizations are working, the military can better plan for what operations it needs to undertake. Non-military organizations may also have an easier time collecting information from certain populations who may be used to an abusive indigenous military presence and, therefore, be reluctant to trust a foreign one. In many cases, NGOs and IOs have been on the ground in a country for years before a foreign military arrives and can provide information on and insights into any number of issues. Additionally, as Prof. Michael G. Sovereign of the US Naval Post Graduate School notes, “[i]nformation sharing is the key to accomplishing the smooth transition to civilian control,” indicating that sharing of information may even facilitate the development of a feasible and timely exit strategy (Sovereign, 1998). In a successful intervention, the military can not leave an intervention until the civilian administration is stable and the humanitarian situation has begun to recover, therefore, it is in the military's best interest to help the humanitarian community in any way it can.

THE UNITED NATIONS

The UN among its many tasks and roles, is the authority in addressing complex emergencies, and its support of an information-sharing mechanism lends the idea credibility. Information-sharing mechanisms not only coordinate the international community, but also help the UN to coordinate its own agencies and departments. As a donor, the UN benefits from knowing where the need is so that it can fund the appropriate activities. Also, as the UN Interim Administration Mission in Kosovo (UNMIK), the UN Transitional Administration Mission in East Timor (UNAMET) and others before them have shown, the UN often takes on the responsibility of reinventing the civil administration of a region post-conflict. These missions are often short staffed and over tasked and could benefit greatly from exchanging

information. However, when sensitive information is in question, as Dr. A. Walter Dorn points out:

The UN does not have guidelines to govern the methods of information gathering, to determine which material is kept secret at what classification level and with what means, to uphold rules of secrecy or workable procedures for classification (Dorn, 1999).

He gives the example of Serbs monitoring the UN Protection Force's radio communications in Bosnia and using the peacekeepers reports on the impacts of Serb mortar fire to correct their fire. The UN fiercely guards its reputation for transparency and impartiality, but to insure that the information it gathers or receives is not used in a negative manner, it must develop a system for limiting its availability to those who would do harm. Keeping this in mind, an information-sharing mechanism for complex emergency operations should be open to as much of the international community as possible, with various levels of access depending on an organization's need. The UN could benefit from participating in an information-sharing mechanism with clear policies on information classification and gathering which it could then adopt for its own purposes.

THE NON-GOVERNMENTAL ORGANIZATIONS

NGOs, not surprisingly, have mixed views on the topic of information sharing. In Kosovo, the NGOs polled were "enthusiastic about the process of monitoring shelter damage and reconstruction activities using the UNHCR geographic coding system" to make the data more easily sharable (Dilley and Smith, 1999). In principle, information sharing should be of most utility to NGOs have much more limited resources than the military or the UN. Having a clearer view of the situation in the mission area would allow for better allocation of these resources. They would be able to distribute aid more evenly to areas in need, and they would also benefit from assessments already conducted by other entities.

There are many NGOs, however, that have objections to sharing information. Perhaps the most compelling come from *Medecins Sans Frontieres* (MSF) and the International Committee of the Red Cross (ICRC). Both have said that in order for their aid efforts to be effective during a conflict, they have to be accepted by all sides and perceived as completely neutral, impartial and independent. As the ICRC has stated, "the important question is not whether an organization really is or declares itself neutral and impartial. What counts is the perception of an organization by the different actors in the conflict" (Fuchs, 1994). They are especially opposed to having any affiliation with governments and are even opposed to connecting themselves with the UN. They argue that if they are seen as acting under the UN and if the UN is seen as an actor in the conflict, as can often happen, then they will lose the perception of neutrality.

Though the ICRC will most likely not officially contribute to an information-sharing regime, their concerns should be taken into account in creating one. Some will still argue that even if it is truly independent, again the perception is what matters and the NGOs will be perceived as intelligence gatherers for the military. At some point though, one has to balance paying these perceptions so much heed at the expense of the mission. Warring factions frequently supply propaganda which causes false perceptions to be reached by the population. If the state which has sovereignty over the region in conflict interests would be better served

by no aid organizations being there, these organizations will always be a target. Even if some NGOs remain unconvinced about contributing information, they can still benefit the information others provide. They need not feel compelled to release information they have gathered, but one would hope that they would at least be willing to share information about their efforts. An information-sharing mechanism should be a public good from which all can benefit.

There are other, more sensitive reasons why some NGOs might not want to share information even among themselves. As ReliefWeb, an online source of information on complex emergencies, notes in its lessons learned, NGOs fear “other organizations might use their information and walk away with funding” (ReliefWeb, 2000). Sharing their information means giving up their edge. Competition also creates another problem of inflated information. This problem is certainly not unique to NGOs, but most of them admit (off the record) that they do it. A publicly available source of shared information would encourage the humanitarian community to police itself. Organizations may also simply be suspicious of how their information will be used in which case a little “data diplomacy” must be employed.² Formally posting information also increases accountability and makes organizations reluctant to share their information knowing they could be held accountable for something they said in a report months before which is now easily accessible on the web (*Ibid.*). Despite these concerns, many NGOs have become convinced that information sharing is beneficial to all involved and have participated in networks dedicated to this purpose.

CURRENT EFFORTS IN INFORMATION SHARING

THE MILITARY

Many efforts have already been made to create information-sharing networks which often produce impressive results and which can be used as models for the creation of a more comprehensive mechanism to serve those responding to complex emergencies. The Office of the US Secretary of Defense has established a process called Civil-Military Emergency Planning (CMEP) as an “affordable and enduring tool, by which the USA can assist emerging democracies to prepare for sustained multi-national cooperation in humanitarian assistance operations” (CMEP, 1999).

Among other functions, the program conducts workshops to enable Partnership for Peace (PfP) countries to develop common databases and to encourage them to work with the Euro-Atlantic Disaster Response Coordination Center and the UN Office for the Coordination of Humanitarian Affairs (OCHA). CMEP process is focused initially on Southeastern Europe and is encouraging the creation of a Crisis Information Network which must be able to interface with many other systems, but the process is also underway in other areas such as the Carpathian, Baltic and Black Sea regions. Given the success of the program thus far, it may be used as a model for other regions such as Southern Africa.

² This phrase “data diplomacy” came out of a recent visit by the Survey Action Committee (SAC) to Kosovo, a partner in the Global Landmine Survey, in describing their efforts to obtain data from other organizations on the ground. Often they encountered a quid pro quo kind of attitude. The phrase was coined by Shawn Messick, a consultant working for the SAC at the time.

Another information-sharing mechanism among PfP and NATO countries is the PfP Information Management System (PIMS) which was established by the US Department of Defense “to provide a dedicated information management and communications infrastructure to members of the PfP community.” The system employs an intranet with secure ties to the internet to insure the security of sensitive information and to control bandwidth and processing resources. PIMS provides common access to information and exercises collective cost avoidance through collective database development, operations and maintenance.

The US military’s Center of Excellence in Disaster Management and Humanitarian Assistance is developing an effective information-sharing mechanism in a project called Combined Event Notification Technology and Unified Reporting (CENTAUR). The mechanism addresses the “need to coordinate the activities of states and international organizations for responding to complex humanitarian disasters” and the problems associated with inadequate information sharing by those actors (Bollettino, 1999). The developers of CENTAUR acknowledge the long-standing mutual suspicion between militaries and humanitarian organizations, but as post-Cold War conflicts see an increase in the deliberate targeting of NGO and UN staff by warring factions, the UN and others have “entertained the idea of working more closely with governments and militaries to exchange information that would prove vital to the security of its local staff in the field” (*Ibid.*, 1999). The hope is that these actors can begin to develop a level of trust in order to work together more effectively. The software for this system is still being developed but was used in Turkey to track relief supplies after the earthquake.

THE UNITED NATIONS

The UN has also developed mechanisms for sharing information. One such effort is the UN Inter-agency/Departmental Framework for Coordination which concerns itself with early warning, preventative actions and preparedness measures. This Framework Team consists of members from 10 UN agencies concerned with peace support operations and/or humanitarian assistance and meets monthly to discuss potential complex emergencies. If the team agrees that a situation requires more attention, they call a review meeting in part to share information about the situation/country in question. From there, if the situation warrants preventative or preparedness measures, it is referred to the Executive Committee on Peace and Security. If humanitarian contingency planning or preparedness measures are deemed necessary, it is referred to the Executive Committee on Humanitarian Assistance. The team also has plans to work on improving its methods for identifying potential crisis as well as for strengthening its links to the decision-making entities. This team appears to be the continuation of the Humanitarian Early Warning System (HEWS). The purpose of this system developed in 1994 by the UN Department of Humanitarian Affairs (DHA) was to provide qualitative and quantitative information to decision-makers on potential conflicts. Because some of the information provided to the decision-makers was sensitive, it was limited in its dissemination.

When a humanitarian disaster occurs, especially if the onset is unanticipated, then the coordination mechanism is the UN Disaster Assessment and Coordination (UNDAC) Team. This team conducts rapid, on-site assessments and coordination in emergency situations. One of its key functions is to disseminate information about the national response capacity of the

affected country to various international relief teams to facilitate an appropriate response. In addition, the International Search and Rescue Advisory Group (INSARAG), which is also under the UN, promotes information exchange on best practices and lessons learned in international emergency response operations as well as improvement of emergency preparedness and cooperation among international search and rescue teams.

As mentioned above, ReliefWeb is, very successful project of UNOCHA in information sharing for complex emergencies. This standing, internet-based service “centralizes and disseminates information on humanitarian emergencies and natural disasters” (ReliefWeb, 2000). It covers all ongoing emergencies, is demand driven and provides links to a number of other information networks. To insure transparency and impartiality, ReliefWeb posts the information it receives without editing, rewriting or tampering with it, and it sources and dates every document it posts. The process of creating this service began in 1994 as ReliefNet which, after a number of setbacks, eventually evolved into ReliefWeb and was fully operational by June 1996. One of the most important lessons the staff learned from this evolution was that having a clearly defined mandate with strict definitions of what it can and can not do is essential to its success. Otherwise, it would have been pulled in too many directions and not have been able to provide the service for which it was initially established. The information posted on ReliefWeb is extremely timely and of tremendous utility to all those involved in complex emergency operations.

Another valuable information-sharing network sponsored by UNOCHA is the Integrated Regional Information Network (IRIN) which seeks to bridge the enormous information gap across Africa. The philosophy on which IRIN is that during a humanitarian crisis, “[w]ithout constantly updated and accurate information..., it is impossible to respond effectively. People die and money and supplies are wasted” (IRIN, 2000). This network provides information on the situations in Africa via email in the form of reports, news items, updates and weekly digests in French, English and Kiswahili to some 6000 subscribers. The information provided is not simply gathered from sources and then duplicated but enhanced “with further analysis and details of essential interest to the humanitarian and disaster-relief community” (*Ibid.*, 2000). IRIN also translates its reports into the local languages, empowering local communities as well as supporting democratic movements and civil society. This network is an innovative and powerful tool for supporting humanitarian efforts in Africa.

The prototype for an effective information-sharing mechanism is the Humanitarian Community Information Center (HCIC) in Kosovo. The HCIC provides its services out of the UNHCR building in Pristina supplying a database of local and international organizations working in Kosovo, giving practical advice and information of interest to the humanitarian community and providing central bulletin boards and agency mailboxes. In addition, the center disseminates information through its webpage (www.reliefweb.int/hcic/) especially in the form of maps and geo-referenced data for which the codes have been standardized and are compatible with the two major commercial off-the-shelf Geographic Information Systems (GIS) software packages. GIS ties information to a geographic location allowing various datasets to be viewed as layers on a map. Some of the most important categories of information for complex emergency operations lend themselves to geo-referencing, i.e. population density, refugee flows, location of landmines and unexploded ordinance, atrocity sites, — to name only a very few.

By connecting to the internet, organizations can theoretically obtain any information from the HCIC site at any time and from any location worldwide. This means that the practitioners in the field can view and use the same information their strategic planners at headquarters are using. Donors can also use this information from a relatively objective source to assess the progress in their areas of interest. Though sponsored by the UN, it promotes and facilitates coordination not only among UN agencies but also among NGOs, IOs and donors providing humanitarian relief in Kosovo. The HCIC has also begun to support the pillars of UN Interim Administration Mission in Kosovo (UNMIK), specifically the civil administration, institution building and reconstruction. Ultimately, the HCIC could become a tool of local governance in Kosovo. The humanitarian community has gone a long way in developing mechanisms for information sharing for humanitarian assistance operations into which the information needs of peace support operations need to be incorporated.

Though the HCIC has received very positive feed back on its services, as it transitions from the humanitarian phase of the mission, it is evaluating itself and finding areas in which it can improve. The HCIC should increase its support to UNMIK at the strategic and operational levels, both inter-pillar and inter-departmental. In conducting this evaluation, the need for increased participation of Kosovar NGOs was also identified as an area for improvement which also implies the need to provide more services and information in local languages. In addition, the centre needs to develop a non-binding advisory board of stakeholders in the humanitarian community to guide the direction of its activities. And finally, though the HCIC has gained a reputation as “an all-informed source,” it is seeking to improve its information gathering, management and dissemination systems noting that “[a]ccess to more and increasingly sophisticated information and data will be crucial as agencies design and implement targeted rehabilitation and development programs in an environment of declining resources” (SRSR-HA Kosovo, 2000). The HCIC has done remarkable work in Kosovo and should be used as a prototype for future efforts.

THE NON-GOVERNMENTAL ORGANIZATIONS

In the in the broader humanitarian/disaster relief community, there are also a number of information-sharing networks which generally focus on disaster management. One such network is Supply Management System (SUMA) developed by the Pan-American Health Organization (PAHO) and run by FUNDESUMA, an NGO headquartered in Costa Rica. Whenever a complex emergency occurs in a Latin America or the Caribbean requiring the donation of supplies from within or outside an effected country, FUNDESUMA assists the PAHO in the operational deployment of SUMA. The teams gather information about donated supplies at points of entry as well as at distribution points and in the field. A goal of this effort is to monitor the pledges from donors and identify gaps or duplications. SUMA encourages accountability and transparency, but is resisted by some by national disaster relief authorities and a few NGOs. In future, however , it would like to provide its information on the internet.

NGOs are also using information sharing to promote landmine awareness in communities effected by them and also to help to end the harm they inflict on civilians. The Survey Working Group, a collaborative effort among the NGO community, the UN Mine Action Service (UNMAS) and the Geneva International Centre for Humanitarian Demining (GIC). Together they have undertaken the Global Landmine Survey Program to:

... provide data for improved planning in existing programs and for overall national plan development where no programs exist; [to] provide data for more rational targeting of international donor resources; [and to] provide quantifiable baseline data and progress indicators for all mine action programs (Global Landmine Survey, 2000).

Level one of this survey attempts to provide a general outline of mine-affected communities focusing on developing information about local perceptions of the social and economic impact, community knowledge and general location of landmines. All the information gathered is collected into the Information Management System for Mine Action that has a GIS component. By geographically representing this data, planning by making priorities clear, showing progress and providing policy makers with information about the social and economic impact of landmines on local communities.

A prototype network for information sharing for disaster response, preparation and relief is HazardNet. It is being developed as a collaborative project of the International Decade for Natural Disaster Reduction and its goal is to:

... enhance the timeliness, quality, quantity, specificity and accessibility of information for persons and organizations world-wide concerned with preventing, mitigating and preparing for large-scale natural and technological emergencies (HazardNet, 2000).

The network is based on the ideas from the International Emergency Reduction, Readiness/Response System (IERRIS) project which was the first internet-based network devoted to sharing for disaster related information. Once operational, HazardNet will provide a continuously updated map displaying where hazardous events are occurring from which users can obtain more detailed information by selecting a particular area. It will also provide GIS data and information by hazard category. This network is a collaborative effort hosted by Simon Fraser University, Vancouver, Canada.

Global Disaster Information Network (GDIN), another very promising information network, began as an effort of the US Government but has become a “voluntary, independent, self-sustaining, non-profit alliance of professionals, organizations and nations from all sectors of society with an interest in sharing disaster information” (Ankara Accord, 2000). Its charter lays out four specific goals: to promote information sharing, to foster agreements on standards, to adapt technologies to information sharing and to provide support services. All information that organizations give to GDIN will be voluntary but it will have to comply with the networks agreed upon standards. GDIN has the potential to reduce the costs and losses from disasters in a number of ways including: providing timely information when and where it is needed; reducing the costs associated with producing, providing and using disaster information; leveraging the efforts of existing disaster information and relief networks; allowing for a more timely and coordinated response; creating synergy to enable the production of new kinds of information; and increasing public awareness of how to plan for and respond to disasters. This initiative appears to have widespread and diverse support and has the potential to have a real impact on disaster related operations.

Each of these different networks can offer valuable insights into information-sharing mechanism for both peace support and humanitarian assistance operations. They provide a breadth of experiences from which to draw lessons. Though there has been a great deal done

in the area of information sharing, generally the focus has been on either the military side for peace operations or on the humanitarian side for disaster management. In situations where both are included, information sharing is ad hoc, as with the HCIC in Kosovo, and therefore, prone to make the same mistakes every time. And, to answer a question with a question, why are there so many different, separate information-sharing mechanisms? The reality is that there is still often a large gap in coordination of complex emergency operations often in large part due to a lack of accurate information by some or all of the actors involved.

WHAT SHOULD AN INFORMATION-SHARING MECHANISM LOOK LIKE?

WHAT KIND OF INFORMATION SHOULD BE SHARED?

In any complex emergency, there are many different kinds and levels of information that could be shared, and some organizations may have qualms about what kind of information should be shared. For operations which occur in response to a natural disaster like Hurricane Mitch or the floods in Mozambique, information sharing is an easier issue to tackle. Generally the motivating factor, once an organization or government is actually involved, is to help the victims immediately and/or to rehabilitate those affected. For this reason, there appears to be less reluctance to share information in preparation for and during these types of operations, and much has been done in the way of forming information-sharing mechanisms to support them. However, communication and information sharing among NGOs at least, is “better (more robust, open and detailed) during the crisis phase of a complex humanitarian emergency than during the care-and-maintenance phase” (Buzard, 2000). As an operation moves from relief to development, competition for funds becomes acute as the situation may have receded from the front-pages.

In peace support operations, it is more difficult to encourage information sharing, because there are likely to be many more incongruent interests at stake. There are the divergent interests of the combatants, who may not be wedded fully to a peace process. There are also the interests of the intervening states which may or may not correspond to the interests of the warring factions and for which the state may perhaps be willing to use force but not let its soldiers die. And then, there are the interests of the international community as a whole, represented by the UN, and those of the NGOs that often have competing sympathies. With all of these divergent interests it has been difficult to establish a trusting relationship among these actors.

There have been copious civil-military coordination symposia and international conferences on the topic, and though it is a slow process, progress is being made. One such conference specifically devoted to this issue was hosted in April 2000 by the US Institute of Peace and the US Army 353rd Civil Affairs Command on Civilian-Military Cooperation in Complex Emergencies. This conference brought together representatives from the US and British militaries, the UN and the NGO community in an effort to address the issue of information sharing. The conference produced an increased understanding among the groups contributing to complex emergency operations and series of recommendations for sharing information. Even the representatives of NGOs that have policies against participating in

formal information sharing where helpful suggesting what a mechanism should include, recognizing its value for complex emergencies in general.

Ethnic Conflict Situation	Foundations of ethnic conflict, relationship of ethnic groups to the state, territorial dimensions of the conflict, control of areas with resources, location and access to religious sites
Political Situation	Key centers of power, sources of internal conflict (wealth, territory, resources, power, ethnic identity, religion, ideology), level of political polarization, nature of local government
Military Situation	Military, para-military and militia forces in the region; size, type of equipment, operational objectives, types of forces and tactics employed, scope of violence and destruction, degree of political control over the military, extent of arms flows
Weapons of Mass Destruction	Types, numbers and locations of weapons of mass destruction; recent and expected movements, potential for their use during the conflict, potential consequences, requirements for consequence management
Landmine Situation	Extent and nature of landmine problem in a country, locate mined areas in the vicinity of key installations and cities, determine current level of demining capacity, mine clearance priorities
Public Security/ Law and Order	Level of crime, lawless and banditry, threat to international organizations, types of police forces, degree of political control of police forces, nature and scope of police violence, effectiveness of courts and administration of justice mechanisms
Humanitarian Situation	Recent population movements, locations and numbers of displaced persons and refugees, level and nature of human suffering, distribution of suffering by region, by class and by group; requirements for food, water, sanitation shelter, medical services, heating supplies, etc.; potential for outbreaks of disease, support provided by neighboring states, threats of ethnic violence and genocide
Human Rights Abuses/ Atrocities/ War Crimes Situation	Assess the scale of atrocities and identify the victims, human rights abuses, possible war crimes, determine which refugee populations are likely victims and potentially have evidence of atrocities, locate possible sites, assess impact of "hate radio" and other activities directed against minorities
Socio-Cultural Situation	Identify cultural institutions and practices that could be leveraged to facilitate popular support to the mission, identify broad-based groups of residents at the village, community and regional level that should be consulted concerning proposed activities
Local Civil Administration Situation	Nature and scale of civil administration in the country, emergency services, electric power, oil and gas, transportation, communications, water and waste treatment, trash disposal, law enforcement and justice, health care, housing, human services
Infrastructure and Physical Environment	Climate and terrain, effect of conflict/natural disaster on the physical environment; political boundaries, population distribution; condition of power generation and transmission systems, railway systems, airports, airfields, roads, bridges, communications, utilities, etc; for each sea, air, rail and river port, size and type of vessel that can be received and the ports capacity for storage and its related support: drainage, resources
Foundations of Economic Activity	State of the economy, unemployment, distribution of wealth, types of natural resources, agriculture, level and nature of trade, quality of work force
Support of Host Government	Level of planning and operational capability to deal with both civilian and military aspects of the operation; administrative capacity to support the operation
Support of Neighboring States	Willingness to help with ensuring the success of the operation; arms control, refugee return, sanctions, logistics support, hate radio broadcasts
Extent of Current International Presence	What UN peacekeeping forces, relief operations or other NGO/PVO activities are operating; activities of private business interests in the area and how those interests effect the key players in the conflict
Possible Expansion or Escalation of the Conflict	"What if scenarios" : dramatically increased ethnic cleansing, splintering of a warring faction, expanded participation in the conflict by a neighboring state or regional power, escalation of the conflict to include chemical, biological or nuclear weapons, major environmental disaster, massive civilian rejection of the operation, increased terrorism,
Immediate Entry Conditions	Status of overflight, access granted by neighboring states and/or parties, compliance with cease-fire, security threats, condition of key bases

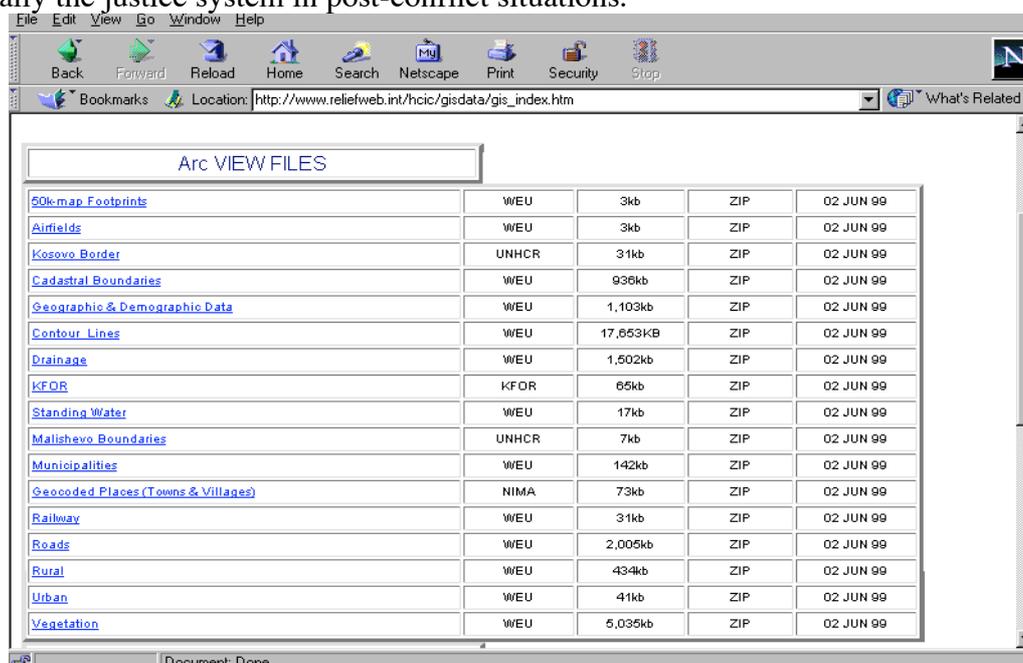
Table 1: Summary of Information Requirements from the US Generic Political-Military Plan for Complex Contingency Operations.

It is important to reach a consensus about what kinds of information should be shared which will help shape the structure of the mechanism. The US Government has created a

generic Political-Military Plan to support its Presidential Decision Directive 56 enacted “to achieve unity of effort among US Government agencies and international organizations engaged in complex contingency operations” (PDD 56, 1997). This plan contains a list of essential elements of information required for planning for complex emergencies which would be of value to all of those planning to engage in such an operation (see Table 1). Most of this information is openly sharable. Only the items related to the military situation, weapons of mass destruction and future scenarios stand out immediately as information that the military might not be able to share, but that information would seem of less relevance to other members of the humanitarian community.

During a complex emergency operation, information needs will evolve. Much of the information needed for advance planning is still relevant during implementation, but it needs to be updated continuously and to be more in-depth. Table 2 shows some of the GIS datasets available from the HCIC for Kosovo and who provided them. Noticeably lacking from this list is a “who’s doing what, where” dataset. Such information would be of great value in increasing efficiency in resource distribution by making it easy to identify which regions and sectors have received adequate attention and which are still in need of it. To the HCIC’s credit, they have compiled an extremely comprehensive list of organizations involved in Kosovo along with their local contacts which is available over their website.

During the reconstruction and development phase, information needs shift yet again, and new organizations may enter the scene as well. During this phase measuring trends and relative change become especially important. The Sphere Project, an undertaking by a wide coalition of relief organizations from the international community, has recently published the “Humanitarian Charter and Minimum Standards for Disaster Response.” These standards address health services, shelter and site planning, water supply and sanitation, nutrition and food aid. Each section includes a comprehensive set of indicators which could be used as the information requirements for the information to be shared. Also extremely important to assessing the development stage of a complex emergency is the state of public institutions, especially the justice system in post-conflict situations.



Arc VIEW FILES				
50k-map Footprints	W EU	3kb	ZIP	02 JUN 99
Airfields	W EU	3kb	ZIP	02 JUN 99
Kosovo Border	UNHCR	31kb	ZIP	02 JUN 99
Cadastral Boundaries	W EU	936kb	ZIP	02 JUN 99
Geographic & Demographic Data	W EU	1,103kb	ZIP	02 JUN 99
Contour Lines	W EU	17,653KB	ZIP	02 JUN 99
Drainage	W EU	1,602kb	ZIP	02 JUN 99
KFOR	KFOR	65kb	ZIP	02 JUN 99
Standing Water	W EU	17kb	ZIP	02 JUN 99
Malishevo Boundaries	UNHCR	7kb	ZIP	02 JUN 99
Municipalities	W EU	142kb	ZIP	02 JUN 99
Geocoded Places (Towns & Villages)	NIMA	73kb	ZIP	02 JUN 99
Railway	W EU	31kb	ZIP	02 JUN 99
Roads	W EU	2,005kb	ZIP	02 JUN 99
Rural	W EU	434kb	ZIP	02 JUN 99
Urban	W EU	41kb	ZIP	02 JUN 99
Vegetation	W EU	5,035kb	ZIP	02 JUN 99

Table 2: Downloadable GIS datasets from the HCIC Kosovo. Hosted on ReliefWeb.

This attempt to answer the question of what information should be shared is merely suggestive and intended to serve as a starting point. Ultimately, the technicalities of what information is to be shared is not as important as getting key parties to the table to agree to participate in an information-sharing mechanism and to help with its creation. Each agency and organization knows its information requirements and must decide what information it is willing to share.

HOW SHOULD INFORMATION BE SHARED?

In establishing any information-sharing mechanism the issue of standardization arises. All organizations involved in responding to complex emergencies to a greater or lesser extent collect and store data, and each has its own methods for doing so according to its needs. Getting all participating organizations to agree on a standard way of collecting and reporting data is a daunting task. GIS provides a convenient and efficient way both to share data and also to add value to the data by geo-referencing it. Once standards are set, GIS has the “capacity to combine data sets across functional areas (e.g. humanitarian relief and economic reconstruction) to provide an integrated view of the operational environment ...” (Dziedzic and Wood, 1999). Many organizations and information-sharing networks already use GIS to analyze geo-referenced data. This technology is becoming more and more widespread and is available commercially off-the-shelf relatively inexpensively. The key is to keep whatever system that is developed as simple as possible without sacrificing effectiveness, — keeping the hardware requirements to a minimum to allow lesser developed countries and organizations with limited resources to participate in and benefit from the shared information. Though not all information which needs to be shared can be geo-referenced, GIS should be a substantial part of an information-sharing mechanism for complex emergency operations.

One problem that must be addressed if an information-sharing network is to work is that of telecommunications. To this end, the Tampere Convention on the Provision of Telecommunication Resources for Disaster Mitigation and Relief Operations has been established “to facilitate the use of telecommunications resources for disaster mitigation and relief” and to promote cooperation among states, non-state entities and intergovernmental organizations (Tampere Convention, 1998). The convention tasks the UN Emergency Relief Coordinator as the operational coordinator for its execution and provides provisions for assistance, immunities, payment/reimbursement, regulatory barriers, dispute settlement, among others, and generally “sets forth an international framework whereby the provision of telecommunications assistance for humanitarian actions may be carried out effectively” (*Ibid.*).

In the same spirit as the Tampere Convention, some have called for developing a “Techies Sans Frontieres” NGO to establish telecommunications links in an area experiencing a complex emergency (CA/USIP Report, 2000). In Kosovo, this need has been met by a collaboration of international partners who have established the Internet Project Kosovo (IPKO) as a non-profit, wireless internet service to “[g]ive the international humanitarian community an efficient tool that enables them to share information, coordinate their activities and communicate more efficiently” and to “[p]rovide free Internet access to key Kosovar institutions and [to] build a lasting infrastructure for Kosova’s Internet” (IPKO, 1999). IPKO’s sponsors acknowledge the inefficiency of the traditional means by which

organizations tackled their telecommunications problems separately, with larger organizations setting up their own satellite systems and smaller ones making due with mobile phones and paying exorbitant fees for meager communications capabilities. Establishing telecommunications capabilities for complex emergency operations is essential to the development of an effective information-sharing mechanism.

HOW CAN AN INFORMATION SHARING MECHANISM FOR COMPLEX EMERGENCIES BE INSTITUTIONALIZED?

Though the UN would be the most obvious organization to promote an information-sharing mechanism for peace support and humanitarian assistance operations, there is some debate about its appropriateness. The mechanism should be headed by a neutral organization, and there are so many connotations associated with the UN that it would be preferable to have a neutral, impartial actor heading the mechanism. However, no other organization exists which has the international authority the UN does, it would, therefore, be the most likely candidate. OCHA could be given the responsibility for heading it to avoid having the mechanism being ad hoc, regardless of who the lead agency is. Trust and transparency are essential elements of an effective information-sharing mechanism and its administrator must exemplify these qualities. Since an information-sharing mechanism would serve not only the UN but also the international community, NGOs, IOs and military organizations participating in complex emergencies should be consulted in forming the initial policy. This way, everyone with a stake in the matter would be able to participate in the decision making process.

CONCLUSION

Each of the information networks discussed above possesses one or more elements which make it interesting to study and which should be incorporated into a comprehensive information-sharing mechanism for complex emergency operations. CMEP, PIMS and GDIN have technical aspects which should be adopted. CMEP is designed to interface with multiple systems and PIMS operates on an intranet to insure the security of its information. In considering developing one information-sharing mechanism for complex emergencies in which so many different organizations will be involved, the system must be as flexible as possible.

To organize the chaos, however, GDIN is working on developing standards for recording and storing its data. It is important to have flexibility, but GDIN has recognized that there must be some order. Also, though the UN is devoted to transparency, some of the information which needs to be shared among the international community would be dangerous if in the hands of a party to a conflict. HEWS also limits the dissemination of its reports, though it is considering opening some of its information to be posted on the internet. Whatever sort of mechanism is developed, it needs to have a means by which to share sensitive information securely.

For a number of the networks, their philosophy is the most attractive aspect. The CENTAUR system is interesting because it is a military system that is earnestly attempting to address humanitarian assistance and working with the international community. The IRIN is devoted to closing the information gap in Africa and to supporting democratic movements

and civil society. FUNDESUMA is attempting to promote more transparency and accountability, though some of the governments with which it works are averse to allowing information about their abilities and policies on receiving and distributing foreign disaster aid. All three of these networks have many admirable aspects, especially their philosophies on these topics.

The two remaining mechanisms are remarkable because of successes and have several characteristics which should be adopted. ReliefWeb is well established, standing and has a clear mandate. Its users know that it is a reputable source of timely information on a wide range of topics related to complex emergency operations. The HCIC has had much success in establishing standards for sharing GIS data. The centre has also established itself as an invaluable source of reliable information. Both also have a strong self-evaluative aspect by which it continually seeks to improve its services. These two entities have had a particularly positive impact in their areas and should be emulated in future efforts in information sharing.

Effective information sharing for complex emergency operations is becoming a reality. Many efforts have already been made especially by the disaster relief community, but there needs to be more of an effort for peace support operations which means that the UN and militaries must also agree with the concept. The international humanitarian community has already taken advantage of the benefits of information sharing in developing a number of different information-sharing mechanisms dedicated to sectoral or regional information needs. For complex emergency operations in which the military is involved to provide security and/or to deliver humanitarian assistance, there also needs to be a robust information-sharing mechanism incorporating it.

Information technology has made it easier to communicate. This technology can be harnessed to facilitate information sharing to improve complex emergency operations at all phases. At the most basic level, the goal of any complex emergency operation is to help relieve or mitigate human suffering, and information sharing facilitates the achievement of that goal. Momentum is mounting as it becomes increasingly clear that the entities participating in complex emergency operations are interdependent and that coordination is of vital interest to the ultimate success of the operations.

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