

CHAPTER XXIX

Information Sharing in Kosovo: A Humanitarian Perspective

Molly Inman

The idea of information sharing among actors supporting 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. The omnipresence of the Internet and the ever increasing use of geographic information systems (GIS) to analyze data have turned the notion of creating an information-sharing mechanism for complex emergency operations into a reality. In the evolution of the concept of complex emergency operations, the mission in Kosovo has been on the cutting edge in many fields including information sharing. Though serious gaps in this aspect of the mission remain, they have become much more narrow over the course of the mission and are receiving serious attention. This chapter describes the information sharing efforts among the members of the international community in Kosovo and discusses the lessons learned from their experience.

Complex emergency operations are frequently beleaguered by poor coordination and cooperation that could be substantially improved if knowledge about conditions on the ground were made readily available in an organized manner for collective use. In the absence of information sharing, organizations must collect their own data on affected areas and as Max Dille of the Geographic Information Support Team¹ notes, "[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 local population become frustrated by continually being assessed without receiving aid or seeing progress.² Such inefficiencies can be partially remedied by creating a mechanism to standardize and to coordinate the collection and sharing of information.

Information sharing in planning and executing complex emergency operations results in:

- Improved coordination of sectoral activities;
- Increased accountability;
- Improved program efficiency; and
- Support for a transition from relief activities to reconstruction and rehabilitation.³

Organizations know what data have already been collected and where there is a dearth, increasing efficiency and promoting coordination among collecting organizations. Once relief providers have analyzed the data, they know where supplies have been distributed and what areas have yet to receive any, resulting in better allocation of relief resources. The coordination of the assessment process and sharing of the results are vital because "grasping the totality of a complex emergency requires more information and understanding than most organizations can gather and analyze alone."⁴ Organizations need not abandon their independent information collection and analysis processes. By coordinating what they will assess and sharing their results, all organizations can benefit from the more thorough and wider assessments while expending fewer resources.

Though the mission in Kosovo charted new territory in the realm of information sharing, the process still requires much improvement to operate at its full potential. An unprecedented amount of resources were poured into Kosovo by the international community, which as experience has shown, can actually hinder information sharing. In other humanitarian assistance operations such as the one in Mozambique, resources were so scarce that the international community including the U.S. military were required to share information and coordinate their efforts if they were to be in any way successful. In Kosovo, however, many agencies, organizations and NATO in particular, brought with them so many resources that information sharing and coordination did not appear as urgent. Much waste could have been eliminated from the outset had there been a functioning information sharing mechanism, especially one that conveyed to the international community which organizations and agencies had competencies in which sectors.

Accountability has also been raised as an issue that plagued the efforts in Kosovo. There are so many different actors working toward the same goal but with different perspectives and agendas. Without knowing what each organization is doing, none of them can be held accountable to the international community for their activities. Organizations rarely hide their activities, but few organizations have the resources to expend to find out what the other 400-plus organizations are doing. However, a mechanism that makes this information readily available encourages organizational peer-pressure, causing them to be self-regulating. An additional concern about accountability: once the information sharing mechanism for the humanitarian community was under development, no real verifying mechanism existed to prevent an organization from providing false information. It soon became evident, however, that if an organization did provide false or inaccurate data, that there was adequate expertise among the members of the humanitarian community to correct the problem. Were it to become a regular practice of a particular organization, that negligent organization would lose credibility.

Geographic Information Systems

In discussing information sharing for humanitarian assistance operations in general, including Kosovo, one must highlight GIS. This technology enables users to integrate location-based data sets and display them together to provide a more complete view of an operational environment. As the U.S. Geological Survey (USGS) defines it, "GIS is a computer system capable of assembling, storing, manipulating and displaying geographically referenced information..."⁵ GIS displays information graphically to clarify the results of and allow for analysis by decision makers. All data must be geo-referenced so that the software can plot it on a digital map. In Kosovo, this was accomplished by assigning a unique place code (p-code) to approximately 2,000 populated areas. Fortunately, GIS technology has become relatively inexpensive and widely available, so that even small nongovernmental organizations (NGO) may afford it. Though developing the data sets and the parameters requires relatively highly skilled technicians to which NGOs may have limited access, they then have the incentive to coordinate more closely with larger IOs such as the UN. to benefit from their technology staff. Once the information is organized, relief

personnel can manipulate it easily even with only limited training that can be delivered via a computer-based tutorial.

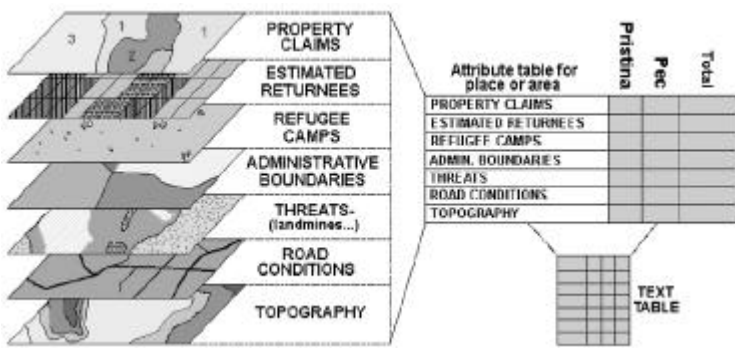


Figure 1. GIS for Repatriation Planning (from presentation by Dr. William B. Wood, Geographer and Director of the Office of the Geographer and Global Issues, U.S. Department of State, "Cross-Border Crisis Intervention: The Use of GIS in Kosovo")

GIS is also valuable to the information sharing effort in complex emergencies because it provides increased incentive for agencies and organizations to agree on a standard method of recording and collecting data. Few disagree that sharing information to support a humanitarian cause is a positive development, but the practical matter of getting them to agree on standard methods is daunting. The information sharing effort in Kosovo has been a pioneering one and will pave the way for future operations. However, even after 18 months, the parties involved are still working toward this goal. Nevertheless, the advantages of using and sharing GIS data are so readily apparent that organizations are committed to finding standards on which they can all agree.

Another advantage of GIS is its simplicity of use that makes it amenable to the often low-tech, chaotic field environment. GIS data can now be recorded and manipulated on a variety of devices including hand-held and ruggedized laptop computers that can be equipped with satellite communications capabilities. GIS data is also readily shared electronically, which allows it to be posted on a central Web site or shared via email or CD. The Internet allows organizations to access information instantly from locations all over the world. The CD allows organizations to use the data without access to the Internet. It is also a suitable format for sharing information that remains relatively

unchanged such as topography. Practitioners in the field can view and use the same information that their strategic planners at headquarters are using. Donors can also use this information to assess the progress in their areas of interest.

GIS is so valuable for use in humanitarian operations because it can enable the international community to assess the operational environment in aggregate. The problems and progress in various regions can be compared easily to assess the situation and assist decision makers. Clearly, GIS is not synonymous with an information sharing regime, but it does encourage actors to cooperate and lays the foundation for collaboration.

The Kosovo Experience

One of the first advocates of information sharing in Kosovo between the Kosovo Verification Mission (KVM) and the United Nations High Commissioner for Refugees (UNHCR) was the U.S. State Department which proposed the idea in October 1998 to Ambassador William Walker, KVM Head of Mission. The proposal focused on using GIS as the catalyst for information sharing. The KVM used GIS to identify the location of minefields and unexploded ordinance, and the UNHCR used it to record housing damage and the location of internally displaced persons. By combining these data sets along with the location of potable water, they were able to collaborate in better managing the resettlement process. Key to this process was the contribution by the U.S. National Imagery and Mapping Agency of the electronic base map and the fundamental data sets on roads, topography, place names, etc. The State Department's Office of the Geographer and Global Issues also contributed enormously, training both KVM and UNHCR personnel to use GIS. Unfortunately, the escalating violence in early 1999 that caused the withdrawal of the KVM halted the program. However, it could not eliminate the need for information sharing which would increase in the next iteration of humanitarian assistance in Kosovo.

Repatriation

In anticipation of the end of the NATO bombing campaign, the international community began in late spring of 1999 to plan for the eventual repatriation of over 750,000 refugees to the severely damaged province. Hoping that

this massive undertaking would be gradual, the Kosovo Repatriation Information Support (KRIS) program commenced and again was largely driven by the State Department in cooperation with UNHCR as well as the NGO community. The goals of KRIS were threefold:

1. To identify sources and availability of U.S. Government-supplied information relevant for safe repatriation of Kosovo refugees;
2. To build information management tools that allow repatriation managers to... use multiple sources of data for strategic planning and tactical operations; and
3. To ensure that as much useful information was shared with NATO, UN, and NGO agencies involved in repatriation implementation.⁶



Figure 2. Kosovo: Reported Locations of Mines and Explosive Hazards (from Dr. William B. Wood, Geographer and Director of the Office of the Geographer and Global Issues, U.S. Department of State)

The UNHCR established a GIS unit in Pristina and worked with NGOs to develop a standardized Rapid Village Assessment form (RVA) for the relief organizations and KFOR to collect essential data on damage to

housing and infrastructure as well as population and civil society. This feat was a monumental accomplishment for the information sharing effort for complex emergencies. The data collected was relatively accurate and gave the humanitarian community a useful first look at what needed to be done. Resuming collaboration with UNHCR, the State Department sent a team to the Former Yugoslav Republic of Macedonia (FYROM) to begin using the data collected in planning for the coordination of repatriation activities. In addition to the RVA data, NATO flew U-2 sorties in early June to provide unclassified imagery of Kosovo which provided valuable information for the resettlement process as well. Though the spontaneous return of refugees foiled the international community's intention of orderly, planned repatriation, and thus precluded the use of the GIS data for advanced planning, the effort was incorporated into the Humanitarian Community Information Center (HCIC) in Pristina.

The Kosovo Humanitarian Community Information Center

The HCIC has been very successful in facilitating the sharing of information in Kosovo and will undoubtedly be used as a model for future complex emergency operations. It provides its services from the UNHCR building in Pristina while being staffed and resourced primarily by the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) and is supported by the U.S. Agency For International Development, the UK's Department for International Development, Catholic Relief Services, International Rescue Committee (IRC), Organization for Security and Cooperation in Europe, World Food Program, and Save the Children. The Center provides the following services:

- Supplies a database of local and international organizations working in Kosovo;
- Gives practical advice and information of interest to the humanitarian community;
- Provides central bulletin boards;
- Provides agency mailboxes; and
- Promotes the free exchange of information.

Additionally, the center disseminates information through its Web page (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 GIS software packages. One such software package is ArcExplorer, which is available for download online, free of cost from Environmental Systems Research Institute. Using these software packages, agencies can customize maps to meet their specific needs viewing data sets in any combination they wish.

The data sets are categorized into three groups depending on their source and accuracy. Those developed by the HCIC are derived from original Yugoslav Government documents and their coverage is limited to Kosovo. The data sets provided by the European Union are the most accurate geographically and contain the widest range of functional areas, but exclude some areas of Kosovo. The NIMA data sets have lower spatial accuracy than the other two groups but provide coverage of all of Kosovo as well as of neighboring Albania, Montenegro, FYROM, and Serbia-proper. The site also provides a short tutorial on how to manipulate these data sets. In addition to data sets, the HCIC also provides:

- An atlas of Kosovo;
- Planning maps for the regions of Kosovo;
- HCIC Kosovo Encyclopedia CD;
- Kosovo Rapid Village Assessment Data (discussed above); and
- UN agency reports.

One of the most useful items available on the site (which is still under development) is the "Who is doing what, where" information, which provides information on what organizations and agencies are working in what regions. Sharing this information not only allows for the better allocation of resources but also allows KFOR to assess in advance where they might be needed to provide security to members of the international community. Though sponsored by the UN, the HCIC promotes and facilitates coordination not only among UN agencies but also among NGOs, IDPs, KFOR and donors providing humanitarian relief in Kosovo.

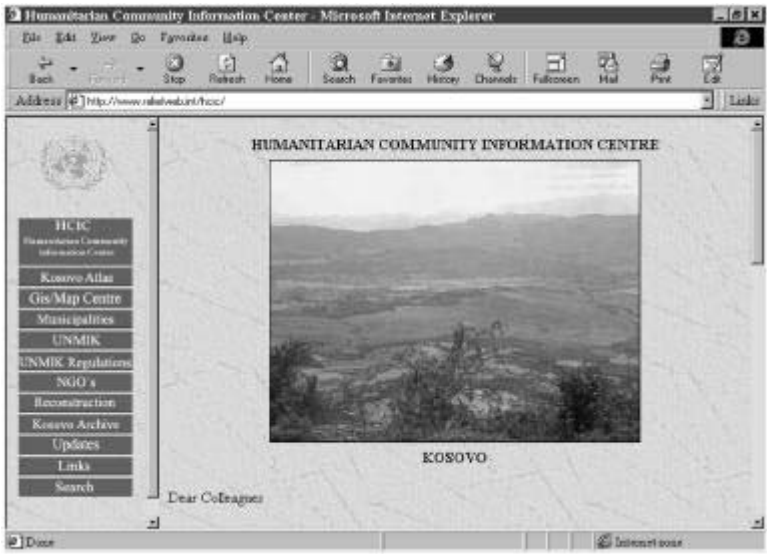


Figure 3. HCIC Web Site Main Page: www.reliefweb.int/hcic/

The Internet in Kosovo

Many of the services provided by the HCIC would not be possible without the presence of the Internet in Kosovo, and in fact, UNMIK is the first major peacebuilding mission that has centrally integrated the Internet. After Serbian forces withdrew from Kosovo on June 12, 1999, the international community had the enormous task of providing immediate humanitarian relief and long-term reconstruction and development for a badly damaged province whose infrastructure had not been well maintained or updated for many years before the conflict. During the NATO bombing, most of the telephone lines between cities in the province had been severed. As the international community returned to begin or to resume aiding the people of Kosovo, it brought with it exorbitantly expensive satellite phones and more affordable but less reliable mobile phones that depended on the Yugoslav company MOBTEL and its one small antenna in Pristina for service. A few residents of the province who had subscribed to Serbian Internet service providers before the war could log on, and the Grand Hotel in Pristina allowed clients to log on for 1DM per minute, which was beyond the means of most local people at the time. With so many organizations, agencies and individuals trying to coordinate the humanitarian effort

and begin the reconstruction effort, the Internet Project Kosovo (IPKO) was formed to begin to fill the communications gap.

The first proponents of this project were Teresa Crawford of the Advocacy Project and Paul Meyer of the IRC. Both agreed that the IPKO should "[g]ive the international humanitarian community an efficient tool that enables them to share information, coordinate their activities and communicate more efficiently," as well as "[p]rovide free Internet access to key Kosovar institutions and build a lasting infrastructure for Kosovo's Internet."⁷ Because the telecommunications network in Kosovo was badly damaged and would require years to repair fully, the best solution for connecting Kosovo to the Internet quickly was via satellite. During the bombing, a company called Interpacket had loaned the U.S. humanitarian effort a satellite dish and 1 year of satellite time for the refugee camp in Stenkovac, Macedonia, which had been abandoned along with the camp during the spontaneous and rapid repatriation of the refugees to Kosovo. Meyer convinced Interpacket to move the dish and associated equipment to Pristina to be used to setup the non-profit IPKO. The IPKO team decided that the safest and most neutral site to install the equipment would be on top of the building being used for British KFOR Civil-Military Cooperation (CIMIC) personnel and enlisted the aid of the British Royal Engineers to ensure that the equipment received adequate electricity. IRC also procured the aid of MikroTik, a company based in Riga, Latvia to provide the necessary equipment and software to allow the network administrator to manage the network. As network administrator, the IPKO team pursued a Kosovar Albanian who was well known for his hard work, resourcefulness, experience, and strong commitment to rebuilding Kosovo, and finally persuaded him to join the IPKO initiative.

Though eventually successful, the IPKO team faced several hurdles in getting the service online: having to replace faulty parts, rewiring the electricity to the building in which it was housed, and trying to get the satellite to confirm its signal. The IPKO is now serving more than a hundred organizations including every U.N. agency in Kosovo, OSCE and most large NGOs, charging between 1500 DM and 2950 DM per month, depending on the type of connection, and is providing its services free of cost to Kosovar civic organizations. Eventually, the IPKO will be handed over to the people of Kosovo and will continue to provide Internet service to the local population for years to come.

Information Sharing and the Transition from Relief to Development

As the mission continues to transition from humanitarian relief to reconstruction and development, the H C IC has begun to support the other pillars of the UNMIK, specifically civil administration, institution building and reconstruction. The H C IC has been an excellent tool for supporting the humanitarian community and has the potential to have the similar successes in promoting information sharing among the pillars. Though the pillars support the same mission, there have been significant instances of the lack of coordination. For example, an EU entity, the International Management Group, developed a \$5 million database that employed over 60 staff, but it would not submit to UN standards to ensure compatibility and refused to share its data with the UN until just before the EU phased it out.

Though the H C IC was originally envisioned as a permanent institution to support relief, rehabilitation, reconstruction, and development in Kosovo, there was no formal, guiding plan until the gradual elimination of the humanitarian pillar prompted the drafting of one. The three objectives are prioritized in this initial document are:

1. Expand and strengthen institutional linkages particularly with UNMIK and Kosovo NGOs;
2. Establish a non-binding Advisory Board to provide guidance on policies and practices; and
3. Expand information gathering, management and dissemination systems.⁸

Though the H C IC will continue to facilitate information sharing among the members of the international community, it also plans to reach out to local NGOs to support capacity-building efforts and to become institutionalized within the community. Specifically, the H C IC is pursuing efforts to make its services and resources available in the local languages and is promoting the H C IC as a neutral meeting place to help to reduce the gap between local NGOs and the international community.

The document also lays out four scenarios for potential management structures for the H C IC. The first maintains the status quo having the H C IC remain under the Humanitarian Coordinator's office and continue

to be funded by OCHA. Though it would continue under its current name, it would be not only of service to those in the humanitarian community, but would also support reconstruction and development activities. The second and third scenarios incorporate the UN Development Program (UNDP). The second would give the responsibilities of the Humanitarian Coordinator to the Development Coordinator, but the HCIC would retain its name and some OCHA funding for its functions associated with the humanitarian community. The third specifies that the duties of the Humanitarian Coordinator be eliminated and the HCIC be placed under the UNDP that would necessitate a name change to indicate to the community its change in focus. The fourth scenario places the HCIC under an UNMIK department or pillar, relieving OCHA of its administrative and financial responsibilities. This question, however it is resolved, will inform planning efforts for future operations.

Two more innovations that are aimed at improving in the information sharing effort in Kosovo are the formation of the Information Group (IG) and the creation of the position of Chief of Information Coordination (CIC). The purpose of the IG is:

- To provide relevant information to be shared over the Internet;
- To promote existing standards and the development of new ones;
- To develop guidelines for information sharing; and
- To create a mechanism for cataloging databases and providing appropriate access to legitimate users.

It is a voluntary group composed of information managers, consumers and providers in Kosovo. Though the IG aims to serve the whole community contributing to the effort in Kosovo, it especially focuses on supporting the information requirements of the pillars of UNMIK, the Joint Interim Administrative Structure, and regional and municipal administrators. The CIC, being assigned to the UNMIK chief of staff's office, will act as a member of the strategic management team and will generally help to set information sharing policy for the mission and liaise with the IG and other entities on information issues within the community. Among the CIC's many specific tasks are:

- Managing the information process through the shift from peacekeeping to development;
- Developing measures of effectiveness for efforts to harness information technology in Kosovo; and
- Communicating lessons learned to the U.N. and other organizations that are likely to be involved in supporting peace operation in the future.

While the C IC will be an element within UNMIK, the IG is intentionally less formal to give it flexibility and independence as well as to attract the participation of entities that may be wary of associating with a formal U.N. agency. It will clearly be vital for the C IC, the head of the HC IC, and the IG to coordinate and communicate about their activities.

KFOR CIMIC Contribution

The reviews have been mixed about KFOR and its contribution to information sharing in Kosovo. KFOR has had the onerous responsibility of establishing and maintaining security in the region and understandably would not want to participate in any activity that may compromise its ability to accomplish this mission. However, it has been criticized heavily for restricting the release of essential yet innocuous information. During the spontaneous repatriation of refugees in Kosovo, those in the humanitarian community recognized the danger of unexploded ordnance to the returning civilian population. NATO was reluctant to release this information and stalled until pressure from the humanitarian community forced it to release it or suffer a public relations embarrassment.

Since that rocky start early in the mission, KFOR CIMIC and the international community have improved their relations and developed strong working relationships. One of CIMIC's significant contributions to information sharing is its daily situation report that was written for Supreme Headquarters Allied Powers Europe (SHAPE) but was invaluable to the international community. The CIMIC officers assimilated information from unclassified sources and became brokers of information, creating a dialog among KFOR, UNMIK and the NGOs. Unfortunately, during summer 2000, SHAPE decided that the information being released was too sensitive (though it was derived solely from

unclassified sources) and halted its dissemination. One CIMIC officer expressed his frustration with the decision, explaining that many in the international community relied on that report for information on the security situation and the blocking of its release lessened CIMIC's credibility and went directly against its objectives. Eventually, the situation was resolved by allowing the release of the situation reports, but limiting it to the local international community on the ground.

Lessons Learned

In general, the feedback on the information sharing effort within the international community in Kosovo thus far has been positive, but there are still several areas in which it could be improved. In comparison with other contemporaneous humanitarian operations, the contributing nations have spent lavishly and with so many resources being poured into the province, there needed to be better coordination to ensure equitable distribution. The following is a compilation of lessons learned from various sources and agencies in the field about the information sharing efforts in Kosovo.

UN Mission:

- All planning and equipment needed for an information-sharing mechanism must be in place from the outset. "Incremental, ad hoc implementation simply means that the information and products are always behind schedule and unavailable when they are most needed."⁹
- Have an information plan for the mission that establishes an authoritative civil-military coordination mechanism. The absence of such a mechanism has led to redundancy, lapses in coverage, and wasted information. The HCIC has performed well as the coordinating mechanism among civilian humanitarian organizations, however its coordination with KFOR on information issues has been spotty. The mission would have benefited from having an information plan constructed with the input of the military, the international organizations, and NGOs to ensure that their interests and concerns were addressed.

- The Internet is an excellent medium to communicate information and it should be developed for data and document exchange with public access.¹⁰
- Because of the high turnover of both civilian and military staff, the relationships among them need constant attention to be maintained.
- Though there has been much focus on the technological elements needed to improve information sharing, it is important not to abandon or ignore face-to-face "soft" information sharing which often enables the sharing of "hard" data by establishing trust among the different actors.

GIS:

- "Staffing and equipment needs for the GIS unit must be adequately anticipated and met to ensure an ability to meet increasing demand for data collection and mapping services."¹¹
- A base map must be prepared ahead of time. Often in regions where complex emergencies erupt, the information needed to develop an adequate base map which shows topography, regional borders, district borders, and other semi-permanent features is lacking. Even once this information is obtained, creating the base map is time consuming. Policy makers must anticipate potential complex emergencies and devote resources to gathering information ahead of time.
- The response time of an information sharing mechanism must be improved. GIS data sets are particularly useful at the start of a humanitarian mission before many intervening organizations and agencies have first-hand knowledge of the area. The agency or agencies that assume leadership for an information sharing mechanism need to develop a surge capacity to respond immediately to an unfolding disaster.
- Data collection must be standardized. The rapid village assessment form paved the way for standardized data collection in Kosovo. Had different criteria been used to collect and measure the data, it would have been incompatible and impossible to compile into meaningful data sets. However, the RVA form itself became somewhat of a problem in that often they

were incomplete or illegible, leading to a less accurate assessment. New technology can allow data collectors to take ruggedized computers and hand-held computers into the field to record data in an electronic form and then upload it to their central systems via satellite connections or after they return from the field.

KFOR :

- More professional military education needs to be devoted to peacekeeping operations. Many of the decisions from headquarters about CIMIC information sharing demonstrated their lack of understanding about CIMIC. Military education is still focused on educating officers to fight the next Gulf War and, therefore, leaving them unprepared to make informed decisions in the missions the military is actually facing and will continue to face. It is generally a significant challenge to obtain the trust and respect of the international community when it comes to information sharing in a peace operation and transparency is key to overcoming this challenge. KFOR CIMIC had been using their daily situation reports to win the trust of the other intervening actors in the region when the plug was pulled. Even were it to start releasing them again, it will take time to regain the trust of the humanitarian community.
- More is often less; keep it simple! The resources poured into the mission in Kosovo are unprecedented in comparison with other contemporary peacekeeping missions. Unfortunately, having so many resources massed has discouraged the military from having to share information and has encouraged it to seek complicated solutions. In operations with less funding, the military had to work with the international community and share information using local resources and open sources. In Kosovo, however, KFOR expends many resources to collect classified intelligence that often the international community already knows.
- Bilateralism hurts unity of effort. With a mission as highly publicized as the one in Kosovo, it is understandable that nations contributing forces to KFOR would want to get positive media coverage to maintain domestic public support in their own countries. However, many have noted that attempts to receive

positive media coverage results in negative effects upon unity of effort among the MNBs.

The Internet:

- "The Internet cannot function in a vacuum . It needs money... electricity, and a legal and administrative framework."¹²
 - The IPKO team faced all of these obstacles. Though they received generous loans and donations from various sources initially, donors eventually become less enthusiastic and their funds are always limited. To address this issue, the IPKO decided to charge the international community for its services to recoup its costs, while providing their service free of charge to the local population.
 - Electricity was also an obstacle initially. Two power plants that were in previously in poor condition and had been damaged during the bombing were supplying the entire province with electricity. There were often power outages and power surges, which the highly sensitive high-tech equipment could not tolerate. To overcome this obstacle, the IPKO team had the whole room housing the server rewired and connected to a generator that would provide power to the project automatically in the event of a power outage. They also installed several Uninterrupted Power Sources (UPS) to protect against power surges.
 - Signing the MOU was key to giving the IPKO the authority to provide its services. In the post-conflict environment, there was no functioning legal system, leaving ambiguity about what laws still applied in the province. By signing the MOU with UNMIK, the IPKO established its legitimacy.
- It is important to make certain the system benefits the local people in the long-term and not just the international community in its relief efforts.
- An appropriate organization must be chosen to develop and administer an ISP in post-conflict situations. The International Organization for Migration, whose main function is to transport refugees, was tasked by the U.S. Information Agency to provide

Internet connectivity to refugees at the refugee camp in Stenkovac, Macedonia, but it lacked the expertise and capability to make this effort a success.

Acquiring data:

- Any information sharing mechanism must solicit information; it cannot just wait for NGOs and IOs to come to it with data sets.
- In that same vein, it must be worth an organization's time and effort to share information; for example, for cooperating with the information sharing mechanism, they receive communications capabilities for free or at a reduced rate, or have donors require the sharing of information or rescind funding.
- It must be acknowledged that some organizations will never share certain kinds of information. They cannot be forced to do this, but it is valuable to know what information they will not share.
- At some level, information must be analyzed and given some meaning.
- KFOR is an untapped source of information, especially at the brigade level.¹³

Conclusion

The process of sharing information in Kosovo has been very successful and continues to evolve. Future operations will undoubtedly do well to replicate these efforts, but one hopes that they will also give some attention to its lessons learned. The HCIC has revolutionized information sharing among the members of the international community with its formal mechanism. Advances in technology also continue to facilitate information sharing in Kosovo. The UN is beginning to recognize that the requirement for sharing information in complex emergency operations necessitates the creation of a position under the chief of staff for a Chief of Information Coordination. Additionally, the CIMIC community, perhaps more than any other group, has recognized the need to share information and has worked hard to fill this need, laboring to overcome limitations placed on it from higher up in the

NATO command and structure. With so many entities working toward this same goal, the international command unity will continue to narrow the information gap and work toward more effective information coordination for complex emergencies.

¹The Geographic Information Support Team is an informal technical team comprised of geographic information focal points from the United Nations and donor agencies with disaster management and humanitarian assistance mandates.

²Max Dille, "Structured Humanitarian Assistance Reporting (SHARE): Description and Requirements for Georeferenced Data Collection and Mapping to Support Humanitarian Assistance Operations," USAID Office of Foreign Disaster Assistance, 1999: p. 3.

³Max Dille and Nate Smith, Cable summarizing the findings of their December 1999 visit to Kosovo.

⁴Charles J. Jefferson, Ph.D., "Information Dissemination and Use in Complex Emergencies," U.S. Department of State, 1998: p. 3.

⁵United States Geological Survey, "Geographic Information Systems," <http://www.usgs.gov/research/gis/title.html>, 2000.

⁶Presentation by Dr. William Wood, "Cross-border Crisis Intervention: Use of GIS in Kosovo," at the U.S. Institute of Peace, November 17, 1999.

⁷Internet Project Kosovo, <http://www.ipko.org>, 2000.

⁸Office of the Deputy Social Representative of the Secretary-General to Kosovo for Humanitarian Affairs, "The Humanitarian Community Information Centre, Strategic Planning: June to December 2000 and Beyond," U.N. Interim Administration in Kosovo.

⁹Max Dille, "Structured Humanitarian Assistance Reporting (SHARE): Description and Requirements for Georeferenced Data Collection and Mapping to Support Humanitarian Assistance Operations," USAID Office of Foreign Disaster Assistance, 1999: p. 14.

¹⁰Office of the Deputy Social Representative of the Secretary-General to Kosovo for Humanitarian Affairs, "The Humanitarian Community Information Centre, Strategic Planning: June to December 2000 and Beyond," U.N. Interim Administration in Kosovo, p. 11.

¹¹*Ibid.*, p. 3.

¹²United States Institute of Peace, "The Internet and the Kosovo Humanitarian Crisis," The Internet Project Kosovo, <http://www.usip.org/bc/vd/vdiplo-share/ipko.html>, 2000.

¹³Office of the Deputy Social Representative of the Secretary-General to Kosovo for Humanitarian Affairs, "The Humanitarian Community Information Centre, Strategic Planning: June to December 2000 and Beyond," U.N. Interim Administration in Kosovo, p. 10.