

## Case study: Proprietary Software in an Emergency

GISCorps is a non-profit organization, founded in 2003 by the Urban and Regional Information Systems Association (URISA). It coordinates short-term, volunteer-based GIS services to underprivileged communities worldwide. GISCorps supports humanitarian relief, emergency response, health and education, local capacity building, and community development. In its brief history, GISCorps has worked on a wide range of relief projects, including assisting response efforts to Hurricane Katrina in Mississippi (summer 2005), the aftermath of severe storms and flooding in Missouri (spring 2008), and the aftermath of Cyclone Nargis in various areas of Myanmur (Burma, spring 2008).

Volunteers are carefully screened for professional competence and a match of skills and availability with the mission at hand. GISCorps also has a code of conduct posted on their web site. This code is provided in addition to URISA's Code of Ethics and states that volunteers must adhere to the following principles:

- Remain software neutral
- Seek the most appropriate and sustainable technology and solution for the community in need.
- Make recommendation without exploitation or regard for personal or agency profit.
- Refrain from accepting software donations.

A certified GIS professional (GISP) has volunteered through GISCorps to assist in the response to a tsunami that has devastated the coastal areas of a developing country. Help is needed to support damage assessment and critical search and rescue operations by local authorities. Volunteers are needed with skills in map production, spatial analysis, and data management, as well as proficiency with GPS receivers and general experience in disaster management. Participating volunteers include those from GISCorps, but also other organizations.

A GIS software company has donated licenses of its product for use in the emergency. The donation was provided to the local authorities only. However, the number of volunteers and local residents available to map the tsunami damage and critical rescue corridors is much greater than the number of available software licenses. Time is of the essence, as many people will die from lack of fresh water if rescue crews are not able to find the best routes to them around destroyed buildings and debris carried inshore by the tsunami waves. The GISP is aware that several of the other volunteers are sharing software account IDs and passwords.

## References

GISCorps (2008). GISCorps Code of Conduct: Volunteers. Retrieved October 11, 2023 from http://www.giscorps.org/giscorps-code-conduct/

Esri (2005). GISCorps aids hurricane response, *ArcUser Online*, October-December 2005. Retrieved October 11, 2023 from <a href="http://www.esri.com/news/arcuser/1005/giscorps1of2.html">http://www.esri.com/news/arcuser/1005/giscorps1of2.html</a>

Updated October 11, 2023

Esri (2005). Closing the digital divide, *ArcUser Online*, October-December 2005. Retrieved October 11, 2023 from <a href="http://www.esri.com/news/arcuser/1005/digitaldivide.html">http://www.esri.com/news/arcuser/1005/digitaldivide.html</a>

Staff (2008). URISA's GISCorps working on Myanmar (Burma) cyclone recovery efforts, *Government Technology*, May 14, 2008 News Report. Retrieved October 11, 2023 from <a href="https://www.govtech.com/dc/articles/urisas-giscorps-working-on-myanmar-burma.html">https://www.govtech.com/dc/articles/urisas-giscorps-working-on-myanmar-burma.html</a>

## Resources for educators

Suggested discussion points, relevant GISCI Rules of Conduct, and further resources related to this case study are available on request. Send request to David DiBiase (<a href="dibiase@psu.edu">dibiase@psu.edu</a>) along with contact information (including your position and affiliation) and a brief description of how you plan to use the case.

**Suggested citation:** Wright, Dawn, David DiBiase and Francis Harvey (2009) Case Study: Proprietary Software in an Emergency. GIS Professional Ethics Project http://gisethics.org

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This work was supported by National Science Foundation (NSF) grant # GEO-0734888. Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the NSF.

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