



ISCAM 2018

Rochester Institute of Technology
Rochester, NY, USA

POSTER: “Geographic Information Capacity (GIC) Across International Scales: Comparing Institutional Structures of Germany to the United States”

**15th International Conference on
INFORMATION SYSTEMS FOR CRISIS RESPONSE AND
MANAGEMENT**

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INTRODUCTION TO THE POSTER

This research was funded through a grant from the US National Science Foundation and the project International Research Experience for Students: Quantifying Disaster Risk Reduction Geographic Information Capacity with United Nations University Institute for Environment and Human Security and University of Bonn Germany (NSF OISE-1559450). Each student chose an independent topic of interest that was related in some nature to the overall

research project. This poster will contain the results of one of these independent research projects. It was conducted by an undergraduate student. The primary investigator for this overall project is Brian Tomaszewski, PhD.

POSTER SUBJECT

Over the last three decades, the number and severity of natural disasters all across the world has been increasing exponentially (Basher, 2006). This poster will present the information found in regards to geographical information capacity (GIC) as it relates to government, government regulated organizations, and international organizations, including the United Nations, and their involvement in disaster risk reduction and management. Capacity is defined by the ISDR as the combination of all the strengths, attributes and resources available within an organization or community to manage and reduce disaster risks and strengthen resilience (ISDR, 2009). The poster aims to understand similarities and differences and the connection between two governmental disaster management organizations, FEMA in the United States and BBK and THW in Germany, and how they relate to GIC. This poster will present a comparison of the two countries in terms of their organizational structures, how their structures affect geographic information capacity and how geographic information capacity is related to disaster risk reduction and disaster response. The poster will also examine the international organizations and partnerships that also effect global disaster risk reduction and GIC.

The preliminary conclusions found in this research will be presented on the poster. Through comparison, it is clear that the institutional structures of Germany and the United States differ greatly in regards to disaster risk reduction and disaster response. A chart will be included on the poster to show quick comparisons of different figures. A countries governmental structure, and the way it interacts and collaborates with international partners can play a huge role in how effectively and efficiently it responds during a disaster. With the number and severity of natural disasters increasing around the world in the last few decades it is imperative that we understand how these structures effects preparedness and response (Basher, 2006). Specifically, by comparing the US and Germany, and in the future more countries, we can get an understanding of how these governmental structures affect geographic information capacity (GIC). Many similarities and differences exist between the two governmental disaster management organizations, FEMA in the United States and BBK and THW in Germany, that were compared in this poster, however we can still see that they can be effective in managing their disasters, and in most areas throughout their country have a high level of GIC. As analysis continues, we can make recommendations on what structural changes can be made in government entities to help increase GIC when disaster strikes, in both developed and developing countries.

POSTER PRESENTER

Taylor Ruggero is an undergraduate student at Rochester Institute of Technology studying Criminal Justice and Public Policy with a minor in Geographical Information Systems

	<p>Taylor Ruggero</p> <p>tlr2584@rit.edu</p> <p>Rochester Institute of Technology</p>
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