GIS Data Model for Humanitarian Assistance for the United Nations Spatial Data Infrastructure

PROJECT SUMMARY
A consortium of partners led by The George Washington University is currently developing a GIS data model specifically for humanitarian assistance applications. The Humanitarian Data Model (HDM) will provide a starting point for aid agencies to build their internal GIS applications using a geodatabase design that “really works” and an application framework that allows those organizations to quickly become productive. A GIS data model is essentially a framework, build on accepted and proposed geospatial standards, for modeling and capturing the behavior of real-world objects in a geodatabase. Since GIS data models provide a template to reduce the barriers to using and sharing geospatial information, this initiative will facilitate more effective GIS implementation, data sharing, and system interoperability among organizations which provide humanitarian assistance. United Nations agencies, national governments, donor agencies, research institutes, private sector firms and non-governmental organizations (NGOs) are all potential beneficiaries. The HDM will be free, non-proprietary, non-commercial, and independent of a user’s geodatabase software platform, and will be developed as part of the UN Spatial Data Infrastructure.

This international initiative was officially launched in September 2005 in Washington, DC. The project partners have committed to engineering the HDM in coordination with UN OCHA’s Field Information Services (FIS), and to making emergency relief coordination the principal application of the HDM.

TIMELINES
The draft HDM is being conceptualized and will be ready for peer review by December 2007, assuming project funding is confirmed by December 2006. Release of Version 1.0 to UN OCHA FIS expected by June 2007. This timeline includes development of the conceptual, logical and physical models, international peer review, and production of the final schema and supporting documentation.

DESIGN TEAM MEMBERS
In addition to The George Washington University’s Institute for Crisis, Disaster & Risk Management, the HDM Design Team includes representatives from: UNOCHA FIS, UNJLC, United States Geological Survey, Pacific Disaster Center, ESRI, & the Vietnam Veterans of America Foundation.

PEER REVIEW TEAM
A Peer Review Team composed of data modeling experts, as well as potential users of the HDM from within and outside of the UN, will assist the Design Team in ensuring the stability and effectiveness of the model. Peer Review conferences will be scheduled once the Design Team is ready to begin beta testing.
**OTHER UN DATA MODELS**
The HDM focuses exclusively on supporting UN OCHA’s mandate of coordination of humanitarian assistance. But the proposed schema will promote interoperability, and as other models are released by the UN, the HDM could be used complementarily with other data models oriented towards the management of displaced persons, security, logistics, development, nutrition, health, camp management, water & sanitation, etc.

**MORE INFORMATION**
For more information and opportunities to participate, please contact Firoz Verjee, Design Team Leader (fverjee@gwu.edu). Information about The George Washington University and the Institute for Crisis, Disaster & Risk Management is available at www.gwu.edu/~icdrm.