

Irmak Renda-Tanali, D.Sc.
Senior Research Scientist, Institute for Crisis, Disaster, and Risk Management
The George Washington University
rendatan@gwu.edu
(202) 994-3023

Dr. Tanali serves as a Senior Research Scientist at the Institute for Crisis, Disaster, and Risk Management (ICDRM) of the George Washington University. Dr. Tanali consults and conducts research for various government and non-government organizations in the fields of disaster, emergency and risk management; financial analysis of civil infrastructure projects; and civil infrastructure protection with a primary focus on water infrastructure. She has published two books, several journal articles and conference papers. In her doctoral dissertation, Ms. Tanali developed a systems model for identifying and quantifying various mitigation program options for the maintenance of water supply systems against disaster risk. Related to this effort, Dr. Tanali, provided consulting and research services to the US Army Corps of Engineers that includes the development of multi-hazard risk reduction decision making framework and strategies for the civil infrastructure (locks, dams, and navigational waterways) owned and operated by the USACE. This effort incorporated risk management principles into the USACE Civil works infrastructure and was designed to help improve USACE's overall decision making process in terms of allocating limited resources thus maximizing the benefits of the Corps missions.

Other specific consulting and research initiatives which Ms. Tanali provided include:

- Providing subject matter expertise in the evaluation of all of the Federal Aviation Administration's (FAA) Projects within the National Airspace System Capital Investment Program with respect to Risk Management ;
- Assessment of the US Army Corps of Engineers Geospatial Information Technology Applications during their response to the 9/11 Attacks;
- The development of quantitative and qualitative models for the assessment of collision risk and passenger safety on the Washington State Ferries;
- Project Management of the Assessment of cutting-edge information technologies for NASA Ames Research Center's Design for Safety Program;
- The development of strategies and cost estimating relationships for modeling mass care needs for Bay Area earthquake scenarios for the American Red Cross;
- The collecting and synthesizing of human needs planning data for the 1999 Kocaeli and Duzce (Turkey) earthquakes;
- The observation and documentation of the complex inter-organizational response to the September 11 attacks by various emergency management agencies; and
- The assessment of the best response practices for the US Coast Guard.

Irmak Renda-Tanali is an experienced civil engineer. In this capacity, she designed numerous large/mid scale sanitary water supply and distribution, wastewater collection systems in cities, towns, and dwellings overseas, particularly in Turkey and also various residential and commercial buildings in Turkey, Turkic Republics and Russia.

Ms. Tanali received her Doctor of Science degree from the George Washington University, Department of Engineering Management and Systems Engineering in Washington, DC. Irmak Renda-Tanali holds a M.S., and a B.S. in Civil Engineering and an M.B.A. from the Middle East Technical University, an ABET accredited, prestigious university located in Ankara, the capital of Turkey.