



Theme: Dealing with Disasters

Title: Virtual Reality Exposure Training  
for Mass Emergencies and Disasters

Type of Activity: Symposium

Organiser: Ioannis Tarnanas, Peopleware - Creative Assistive Technologies  
Laboratory

Target audience: Scientific Community, Industry, Policy Makers, Media, Teachers,  
Students, General Public

Date and Location: 00.00.0000, 00:00 bis 00.00.0000, 00:00



## Synopsis:

Already a great number of studies have shown virtual reality to be effective in the treatment of phobias such as acrophobia, claustrophobia, arachnophobia, agoraphobia and fear of flying. Slowly, Virtual Reality Exposure Therapy and Training (VRETT) is becoming a viable and acceptable option for therapists. When compared to current standard in vivo therapy, VRETT can be less expensive, less intimidating for the patient and can provide the therapist with greater control of the stimuli with which the patient is confronted.

In the case of Disasters and Mass emergencies the quick timing is of the maximum importance. Patient and therapist need to cooperate and coordinate their actions, requiring communication and interaction using cost effective, fast and ubiquitous user interfaces. In the development of a Mass Emergency preparatory VRETT or a Post-Traumatic Stress Disorder after a Disaster Treatment tool, it has become clear that it can be regarded as a substitute for exposure in vivo. Patients are exposed to the stimuli they fear and this helps in reducing the phobia.

There is also the need for an effective disaster psycho-social preparatory as well as a user friendly tool for all populations unable at the moment to cope with specific future disaster stress, like elders, special needs people and ADHD (Tarnanas et al., 2000).

Furthermore it seems obvious that it is necessary for the patient to have a sense of presence. Here we see a Virtual Earthquake Scenario that was used for treatment and training of Down syndrome children in Thessalonica, Greece.