



Registration and the use of GIS in Crime Scene Investigations and Disaster sites

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Target audience: Crime scene experts, interested laymen

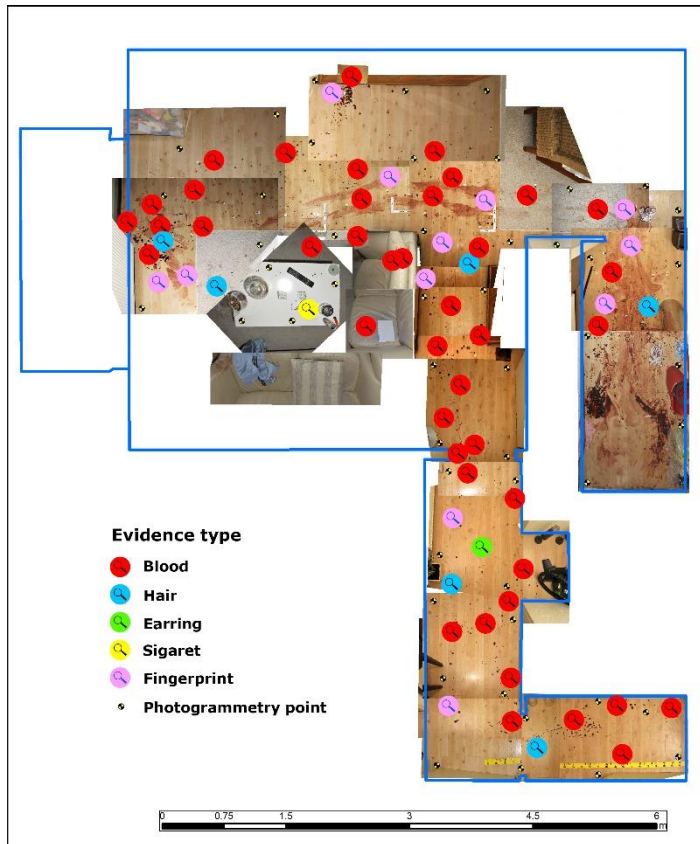
Maximal number of participants: 30

Minimum number of participants: 10

Duration of workshop: 3 hours

To be able to reconstruct what happened at a crime scene or disaster site, it is important to register the location of all evidence encountered at the scene. Once locations are known, an overview of the scene can be made. This not only helps to inform people involved, but also enables investigators to test possible scenarios.

Methods for registration of evidence locations are rapidly developing. The realization that photographs alone are insufficient for crime scene analysis has been established, as additional 360 degree photographs and 3D-scans are becoming the norm. Using a Geographic Information System (GIS), all data or information with a spatial component - such as measurements, aerial photos, maps, and databases - can easily be combined, stored, processed, analyzed, visualized, and presented within a local reference system or a coordinate system. In this workshop we demonstrate how to generate a database while taking samples on a crime scene, how to map the scene including bloodstain patterns, samples, lab results and photogrammetry, and subsequently analyze the scene using a GIS.



Implementing this method on disaster scenes is a challenge. On disaster sites the registration of evidence, be it human remains or otherwise, can be problematic. The time pressure is possibly even greater than on 'regular' crime scenes and the variety of emergency services might make crime scene registration complicated. Therefore, we propose a new System for Calamity Registration (SCAR) in the final part of this workshop. Using a mobile phone app the registration of complicated situations is made easy and fast. Data collected in the field can be uploaded in the commando center, where the disaster site coordination takes place. SCAR will ensure that everyone on the sites knows where everyone else is at all times and which evidence has been registered.