

Cities are digitizing more of their services to facilitate data gathering on mobility, safety, and in relation to communication with citizens. However, authorities still need to tackle issues associated with information fragmentation caused by a lack of common platforms, toolsets and separated data streams per area.

An innovative smart city platform developed by the PS-CRIMSON consortium will improve public safety and disaster management. A collaboration of six academic and industry partners from the Netherlands and Canada has yielded a unique 3-D smart digital model that combines the different streams of data from cities on one common platform.

Researchers from Eindhoven University of Technology developed AI image technology that can detect the location of incidents from an image and re-track the walking routes of people using multiple cameras.

The PS-CRIMSON consortium delivers a platform that serves as a single-entry point for city representatives. This Smart City platform is designed to save time and money, and to also provide a single view of all data collected within a city environment, thus enabling representatives to act upon data in a more timely fashion. The focus of the platform is on the public safety and disaster management domains, where the platform's benefits are extremely important.

Fundamentally, the management of the system lies with the police and local authorities. A lot of privacy protection is built into the system. For the implementation in the Netherlands, people's faces are blurred. Current data rules allow for the storage of video files for no longer than 72 hours, and there is a very strict GPDR law in the Netherlands.

In Vancouver, the PS-CRIMSON application and model showed the effect of an earthquake, which was 6.9 on the Richter scale, on the densely populated downtown. The application and model simulated different scenarios and provided predictions and pre-assessment of damage with a much greater level of detail and accuracy.

Thanks to the application, it is possible to study the effect of the earthquake down to the level of interior units in damaged buildings, and also study the effect of any flooding caused by the earthquake, according to techxplore.com.