ITEA project “PS-CRIMSON”

The role of CycloMedia

Bart Beers – CTO CycloMedia Technology B.V.
12 out of approx. 45 cameras “to keep an eye on”

Phone for contact with e.g. districts commander (Police) or control room

Incident Registration Software

Currently controlled camera
THE PROBLEM

Observer

Camera Joystick

Camera Map

District radio
ITEA is a transnational and industry-driven Research, Development and Innovation (R&D&I) program in the domain of software innovation.

ITEA is a Cluster program of EUREKA, an intergovernmental network for R&D&I cooperation, involving over 40 countries globally.

ITEA is the home of software innovation, enabling an international and knowledgeable community to collaborate in funded projects that turn innovative ideas into new businesses, jobs, economic growth and benefits for society.
PS-CRIMSON project (1/2)

- Public Safety and Crisis Management Service Orchestration
- Sep. 2016 – Mar. 2020

- Deliver integrated **3D digital model and info platform** that
  - Facilitates info collection, sharing, management, analysis, dissemination
  - from public and private urban infrastructures and resources.
  - To overcome fragmentation of info in vertically-oriented closed systems and siloed organization models.
PS-CRIMSON project (2/2)

- Combine
  - Visually-oriented, intuitive nature of Geographic Information Systems (GIS)
  - Highly dynamic real-time contextual data streams
  - Accessible through interoperable ICT-backends of public and private urban infrastructures.

- 3 closely-related use cases
  - Crisis management.
  - Public safety management.
  - Disaster management.
Dutch consortium

- **ViNotion** – crowd and traffic analysis with intelligent video camera systems.
- **Sorama** – makes sound insightful; offers high-resolution acoustic cameras to detect and analyze noise and vibrations.
- **Atos** – applications and advisory services in a.o. the public safety domain.
- **Eindhoven University of Technology (TU/e)** – research on video and imagery related subjects.
- **CycloMedia** – large-scale systematic visualizations of the environment; provider of 3D data.
Role of CycloMedia

- Develop a processing pipeline for building large-scale systematic visualizations of the environment.
Textured LOD2 blocks
Colorized street level point cloud
Colorized street level & aerial point cloud
Colorized street level & aerial point cloud
Point cloud $\rightarrow$ mesh $\rightarrow$ textured mesh (potentially with semantics added)
Thank you for your attention