



munisense

Firework detection system

The annual fireworks in the Netherlands cause millions of euros in damages, hundreds of injured and sometimes even casualties. More and more people resent the loud bangs and the unsafe situation on the streets by the illegal fireworks that become ever more dangerous. Enforcement is labor intensive, as rapid detection of the explosion location was not possible.

Quick detection reduces nuisance

TNO has developed an acoustic system for fast and effective detection of the explosion location of illegal fireworks. Police or vigilante patrols are instantly informed of the timing and exact location via smartphone. This method, with quick succession by vigilante patrols, has proven effective in reducing the nuisance of illegal fireworks.

Integration in our noise management platform

The TNO detection methodology is now integrated in the Munisense INSIGHTNOW™ noise management platform. This releases this functionality at a lower cost and, in addition, the system can be used for management of multiple common noise nuisance situations in the municipality.

How does it work

The system consists of a minimum of four noise meters, that guard a geographical area of 2 km². Each additional 0.5 km² requires an additional noise meter. The noise meters recognize the bangs of fireworks and send the detections to the INSIGHTNOW™ platform. The location of matching detections can be defined to several meters. The location is reported to the relevant enforcement officers immediately. They can view a map with the last five detections on their smartphone. Thus apprehending those responsible is easier.

Reduces illegal fireworks

Tracks those responsible

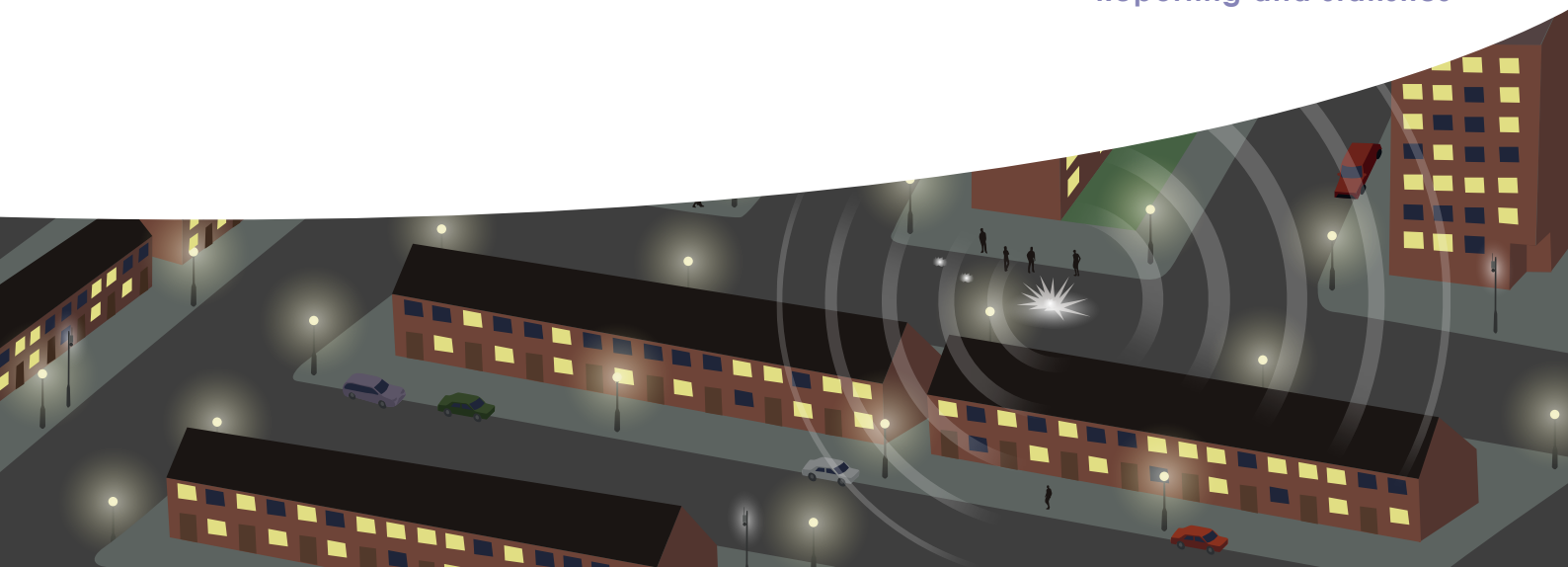
Developed and tested by TNO

Quick installation of wireless meters

Complete customer support

Versatile

Reporting and statistics



The INSIGHTNOW™ portal delivers transparent historical insight into locations and statistics of the detections during the fireworks period.

Support

Munisense can shoulder the measurement burden. The (high) measurement positions are determined, in cooperation with the customer. The customer provides consent for placement and arranges a 230V power point within 25 meters of the measuring position. Munisense can handle (de-)installation and management and provides a short user training



About Munisense

Munisense develops, sells and manages highly innovative real-time and online measurement and control solutions for business and government. Solutions that provide immediate insight in noise, vibrations, water levels, energy use, lighting, water and air quality and that allows effective control over lighting levels, ventilation, and pump activity. Our INSIGHTNOW™ meters are connected to our INSIGHTNOW™ cloud platform where the data is stored in real-time for analysis, visualisation and reporting. The information from the platform can be viewed in a range of specific visualisations any time, any where through a web browser or using our phone or tablet apps. Our applications are developed in close cooperation with universities, governments, partners and customers.

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