

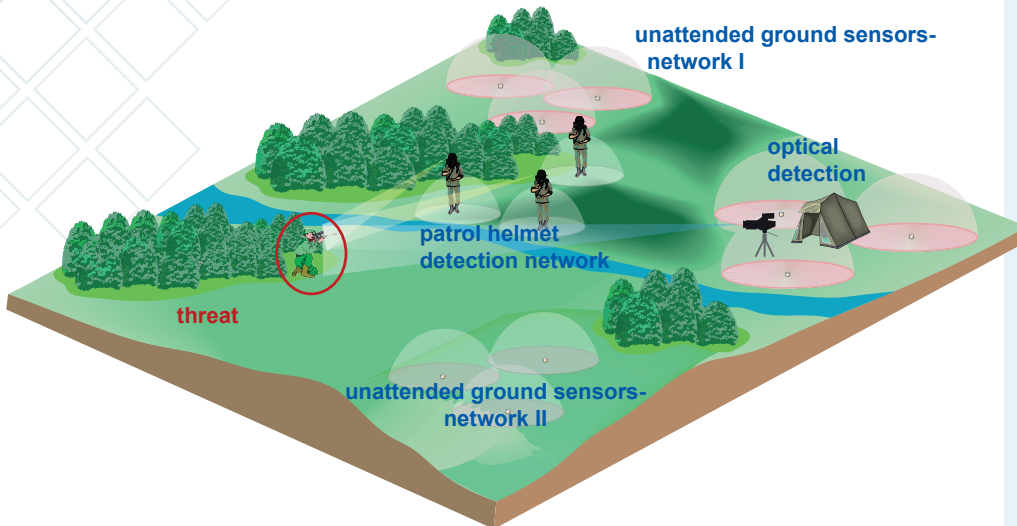
# IMOTEP – Sniper detection



IMprovement Of optical and acoustic  
TEchnologies for Protection

[www.isl.eu](http://www.isl.eu)

IMOTEP offers a better **sniper detection** and an **enhanced reactivity** to counter threats.



Optical and acoustic **sensors**, both mobile and static, are fitted on top of the soldiers' individual equipment, on vehicles or placed in the surrounding environment. The information transmitted by this **sensor network** is **analysed** and processed, providing an accurate real-time **localisation** of the **sniper's position**.

A **spatialised acoustic alert** is then transmitted to the soldiers' helmets, offering them an enhanced, **intuitive** perception of their environment.

The functionalities of the IMOTEP system are designed to be integrated into the existing soldiers' equipment.



## Technical features

- The information is collected by a wireless sensor network, processed, reconstructed and transmitted by 3D Audio Display
- Acoustic signal processing with only 2% mean localisation error compared to the actual shooter-to-sensor network distance
- Eye-safe (1.5  $\mu\text{m}$  wavelength) active laser imaging system using range-gated viewing for threat identification at distances over 1000 m, even under adverse conditions (smoke, fog and night)



ISL – French-German Research Institute of Saint-Louis

5 rue du Général Cassagnou • 68301 Saint-Louis • France