

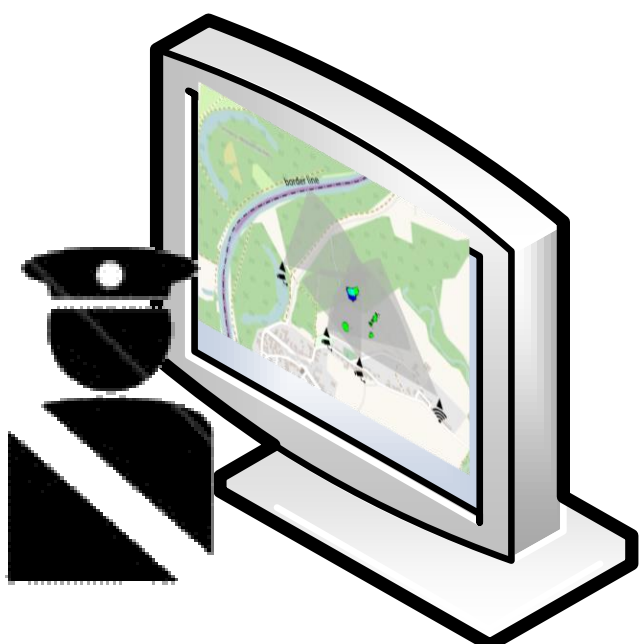


FOLDOUT

Through Foliage Detection of Illegal Cross-Border Activities

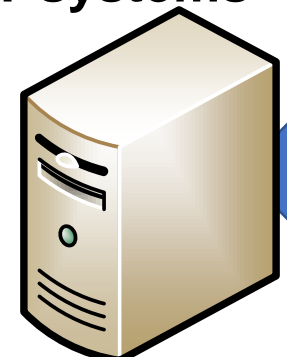


Command and Control Tool



Standard Interfaces

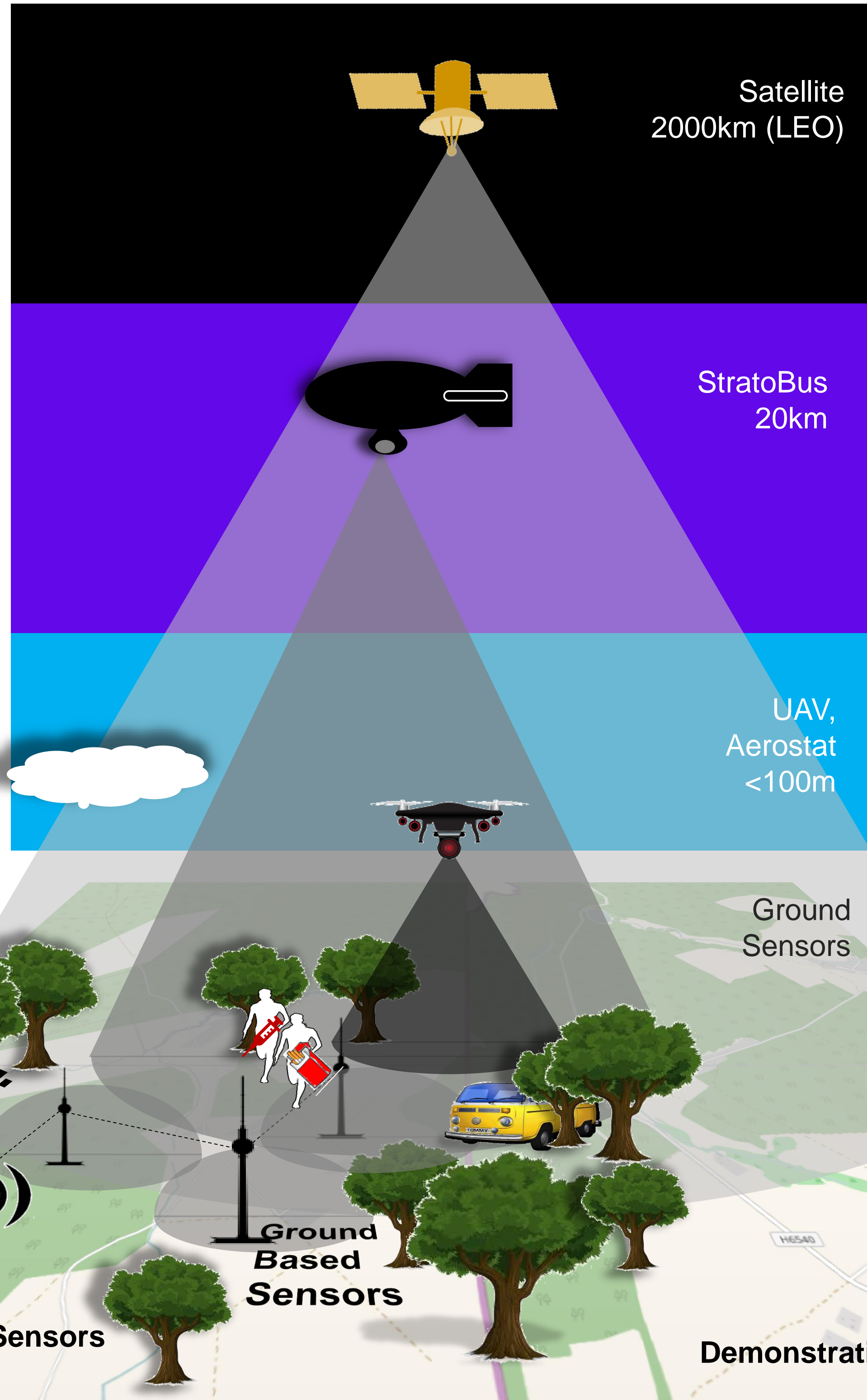
Interoperable Border guard ICT systems



Central Processing/Detection/Fusion/Reasoning

Integrate Sensors

Feedback to sensor network



Time Availability: Resolution:

Hours Permanent

Real-Time Near Permanent

Real-Time Temporary

Real Time Permanent

Ground Sensors

Ground Based Sensors

Demonstration

FOLDOUT focus is on through foliage detection in the inner and outermost regions of the EU. Foliage penetration is an unsolved important part of detecting illegal cross-border activities in border surveillance. By solving the problem of unreliable detections in such harsh environments border guards' workloads are reduced, costs are reduced and, last but not least, lives can be saved.

Detecting vehicles and people through dense foliage in extreme climates with only a penetration technology is prone to high fault rates. FOLDOUT will build a system that combines various sensors and technologies and intelligently fuses these into an effective and robust intelligent detection platform. Fusing several sensor signals increases the effectiveness of detection. Sensors will be influenced (i.e. detection parameters adapted) by events detected by other sensors in the vicinity.

By integrating data, such as vehicle traffic, from outside the immediate border area pre-events can be detected and learned. The events will be analysed with machine learning tools to continuously increase the systems detection and tracking capability.

FOLDOUT will make the tasks of Border Guards simpler and faster by combining events from various sensors to give a complete situation threat assessment combined with suggested reaction scenarios. A two year pilot in Bulgaria and demonstrators in Greece, Finland and French Guiana FOLDOUT will provide fundamental enhancements in the domain of border surveillance and improved search & rescue scenarios.