



ELT

technology for innovation

COMMUNICATION
MONITORING

COMMUNICATION



Full integrated mobile solution for Monitoring of Communication devices

Provides a clear knowledge about communication devices in the area of interest.

When monitoring mobile phones the relevant information (nationality of the phone, and rough location estimate) is collected even when the target is not using the mobile phone.

MUROS-C Monitoring provides a full capability to detect and classify all communication devices in the frequency range from few KHz to 6 GHz and higher. This implies a multi-antenna configuration that allows surveillance of the frequency band by searching / scanning functions, and then direction finding of the communication emitters.

On request, the Operator can select several channels simultaneously and classify the communication device and protocol.

The derived information can immediately be processed broadcasted by the powerful communication equipment.

By positioning one or multiple MUROS-C vehicles in optimised locations around the area of interest the monitoring of the mobile phone traffic can be easily optimized.

MUROS



COMMUNICATION MONITORING



Frequency Bands:
Covering mobile communication standards like
GSM, UMTS, LTE
VHF / UHF
ISM Bands
SatCom

Radio channels, maritime radios and portable
radio transponders

Several hours of autonomous operation

Full integrated sensor suite

Powerful data and voice communication
equipment

Climate control for operation in challenging
environmental condition

Typically two Operators with full
equipped work posts

Integrating the output of a GSM/UMTS
communication monitoring system allows
mapping the mobile phones in the areas of
interest. Without decrypting the protocol,
it is possible to extract rough information on
the position of the phone and its nationality.

By merging this estimate with the data coming
from other sensors, the operational picture of
moving actors in the monitored area is widely
enriched.

State-of-the-art fusion algorithms allow integrat-
ing all available sensor data in order to build up
the aggregated tracks for the operator in the
vehicle or in a remotely-connected control
station. The data processing tool – provided
with the sensor suite – also allows identifying
anomalies as for example clustering of
emitters, or suspect nationalities.

The fused tracks and their labels (“suspect”)
are displayed to the Operator, recorded and
used to steer short or medium range cameras
for detection (long range) and recognition
(medium range), or directly to support the
decision process.