



## ENVIROMENT

### MONITORING AND PROTECTION

#### GENERAL CHARACTERISTICS

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The emission of exhaust fumes from road vehicles, heaters, power plants, factories and incinerators are a source of air pollution, in addition of the noise due to traffic.

Pollution concentrates especially in urban areas where traffic, industrial plants and heating systems have damaging effects on the quality of the air and on the health of the population.

One of the most dangerous pollutants for mankind and one found at the highest concentrations in cities is Pm 10.

The main culprit of this production is vehicle traffic, that emits into the air of cities about one fourth of Pm 10 and about one half of nitrogen oxide, carbon monoxide and benzene measured.

Famas System, committed, since its establishment, to favouring higher quality of life in cities, has designed the **ENVIROMENT** solution to precisely monitor air pollution in cities and in all sensitive areas.

The **ENVIROMENT** solution uses intelligent environmental monitoring systems in a proactive manner within the integrated approach to the abatement of city smog.

The precise characterisation of air quality is performed using specific roadside units. This allows for the accurate study of the correlation of emissions with traffic flows, industrial emissions, etc., as well as the rapid assessment of the efficiency of any reduction and /or decongestion measures taken.

Using an adequately large network of pollutant measurement points, it is possible to identify critical areas that require special actions.

**ENVIROMENT** also provides operators with a series of data that can be used in decision-making processes regarding anti-smog measures.



## MAIN FEATURES

- Precise monitoring of air pollutants and of noise caused by traffic, industry, house heating, etc.
- Detailed and precise information regarding air quality and noise
- Generation of data that can be used to help increase quality of life in cities and for decision-making
- Environmental protection starting from targeted and wide-ranging actions



## TECHNICAL CHARACTERISTICS

### ARCHITECTURE

- Peripheral level: air quality and noise level monitoring units
- Central level: web-based integrated software platform for the processing and display of data and for field system supervision

### COMMUNICATION SYSTEM

- Ethernet; Wireless; FO
- Mobile GSM/GPRS/UMTS network

### DATA DETECTED

- Air quality data: gas pollutants (carbon monoxide, nitrogen dioxide, ozone); Pm 10 particulate matter
- Environmental data: noise

### SOFTWARE PLATFORM

- Web-based
- WebGIS (indication of system location on maps)
- Accessible from fixed and mobile devices (PC, tablet and smartphone)
- Direct supervision and control of field systems
- Alarm generation
- "Trouble Ticketing" system for system maintenance management

### DATA ANALYSIS

- Pollution mapping
- Graphs and tables (reporting)
- Statistical analysis