

# Real-time Noise and Air Quality Monitoring

Sensaris is reporting the first trial for its environmental sensor series. Air pollution is one of the most important factors affecting the quality of life and the health of the increasingly urban population. Considered separately, air pollution policy is insufficient to reach climate targets and climate policy is not enough to reach air quality targets for example with respect to ozone, an air pollutant which will become more of a problem as the climate gets warmer.

Currently, the data of the different pollutants measured at the different stations in a city are typically aggregated to a single number, the air quality index, that is published once a day on a website. There is not enough data gathered to evaluate air quality in a given neighbourhood and the publicly available information is very scarce and difficult to access in a timely way. In the Paris region, pollution levels are measured by a state funded organization operating a loose network of only twenty-six measuring stations for an area populated by approximately ten million people. This network can measure general pollution but does not allow any statements on a more granular level.

Air pollution is highly location dependent, for example in the vicinity of traffic chokepoints. Large variations can also be observed whether one is temporarily exposed to upwind or downwind conditions. With greater concern and awareness regarding environmental quality at the neighborhood level, there is a growing need for integrated indicators to empower users and key decision makers for action.

The miniature wrist-worn solution provided by Sensaris leverages geolocation chips (GPS or Galileo in the future) wearable devices and mobile technologies. Such sensors transform mobile phones into measurement instruments using Bluetooth communication.

Sensaris is a start-up company focusing on the Internet of Things. It provides mobile centric solutions based on geolocation, wireless communication and low power. Its products and software are used for sports, health/wellness and connected urban applications.