



Airport Noise Monitoring System

softech





### SARA, what it does

- Real time and batch noise monitoring terminal (NMT) management
- 2D and 3D radar tracks analysis
- Automatic matching between noise events, radar tracks and flights
- Data validation with audio and video support
- Automatic calculation of European standard indexes
- Complaints management
- Identification of flights violating noise abatement procedures
- Web support
- INM model integration
- SMS/Email alarms and anomalies notification

### SARA, a system

- to evaluate the noise impact in the airport neighbourhood
- to simulate aircraft noise
- to evaluate noise effects related to air traffic growth
- to inform citizens and public offices about monitoring results
- to give useful information about public health
- to manage complaints related to airport activities



### SARA software today is available on the market with the following license types

- "SARA Server" enables noise monitoring terminal full management, European indexes computation, noise and flight operation reports  
Optional modules are : 2D e 3d radar tacks analysis  
INM model integrated in SARA  
Web management
- "SARA Server MARP" is the Multi-Airport version of the standard SARA Server license. With the same license it is possible to manage more noise monitoring systems located in different airports.
- "SARA Client" Adds a local (on the LAN) user to the system.
- "SARA Remote Client" Adds a remote (on the WAN) user to the system.

### SARA, what it is

SARA is a product dedicated to airport noise monitoring system.

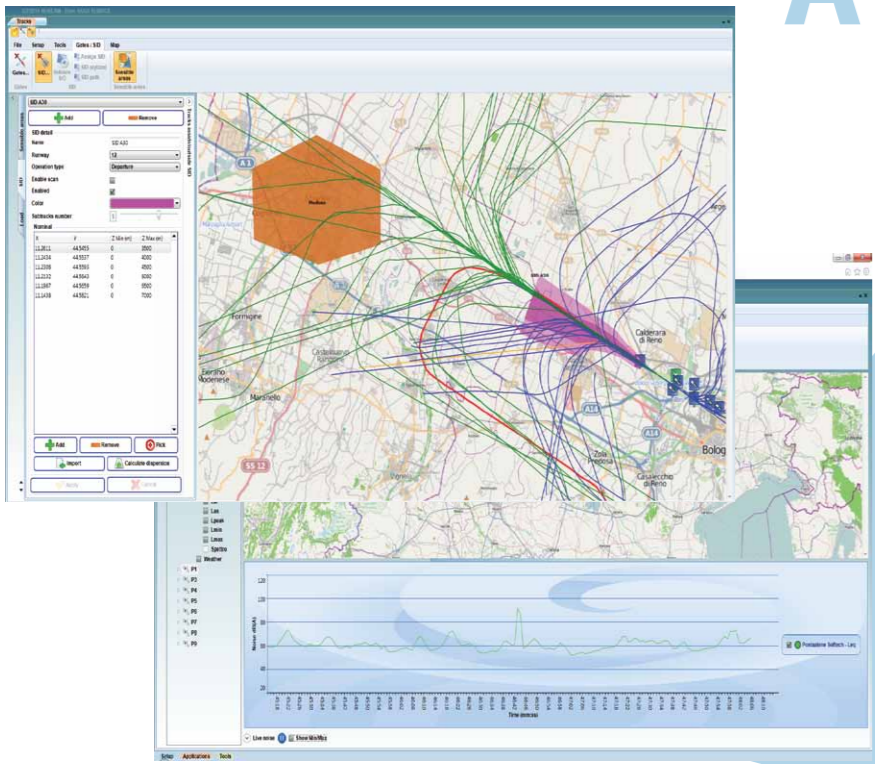
The versatility and potentiality of SARA make it an ideal product to manage noise monitoring issues.

SARA is an efficient and flexible tool both to analyze acoustic events and to study noise environmental impact of flights operations.

SARA integrates several types of information (radar tracks, noise levels, weather data and flight operations) to identify noise sources related to airport activities and to evaluate their effects in the airport neighbourhood.

SARA uses various user-friendly data representation to give a simple and clear view of noise scenarios and radar tracks.

SARA manages acoustic equipment produced by main worldwide manufacturing like 01Db, Larson & Davis, Brüel & Kjær, Lochard, Cirrus, Sinus.



# Airport Noise Monitoring System

## SOFTech, A TOTAL SOLUTION

Softech's proposal contains various services which can be activated with noise monitoring system installation :

noise evaluation studies and noise measurement sessions, with our own equipment and technicians specialized in monitoring system maintenance and management.

On-site and remote, real time assistance; web ticketing

Noise monitoring system management : data validation and periodic publication of documentation summarizing system activities and results

Training and site maintenance

SARA's users workgroup to share experiences, methods and procedures

### Software fully planned and realized by softech

- Capability to upgrade the software to fulfill new laws or user requirements
- Reduced time and cost development
- Free SARA software update

SARA software architecture has one server component dedicated to data acquisition and Management and one or more client components dedicated to local or remote users.

Today a WEB interface to evaluate noise monitoring system data and results is also available.

### Noise monitoring systems is structured as:

- Noise monitoring systems (NMTs) fixed or mobile
- Software SARA
- Authorities providing flight plans
- Authorities providing radar tacks
- Communication network (Internet, Intranet, telephone lines)

### Main SARA characteristics are:

- Modularity
- Security
- Automation
- Extendibility
- Readability
- Self diagnostics
- GIS support

## Integration between noise and air quality monitoring systems

SARA has become an integrated product for noise and air quality monitoring in the airport neighbourhood:

- Monitoring of main air pollutants using certified methods
- Hardware and communication equipments sharing between noise and air monitoring systems
- Real time and historic analysis of the air pollutant
- Correlation between pollutant levels and flight operations
- SARA software platform sharing
- Integration and sharing means a strong abatement of cost to build-up both systems

