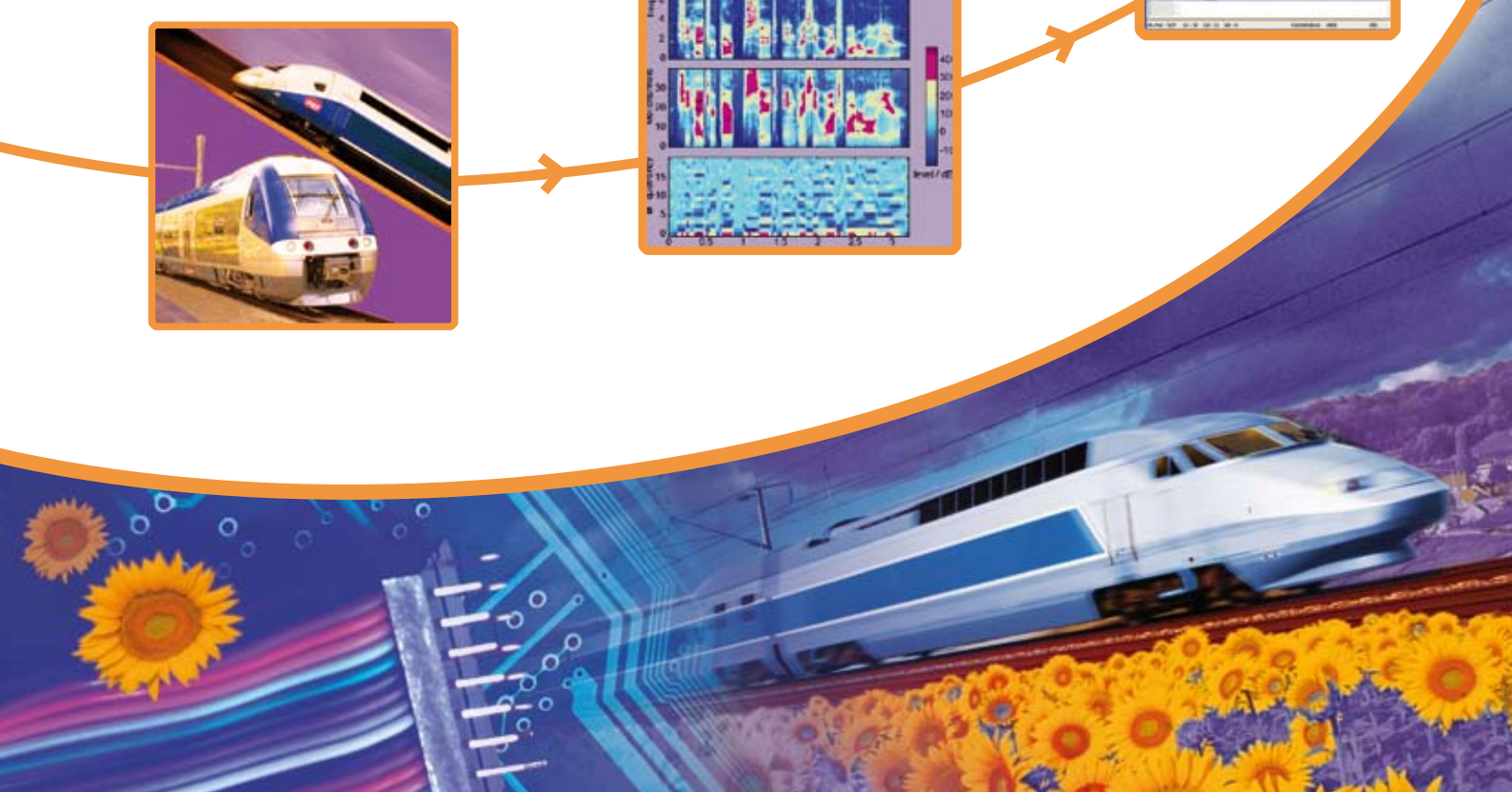
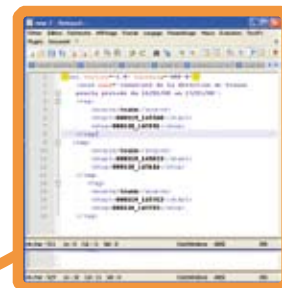
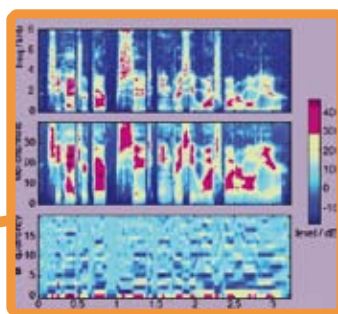




SOUND SOURCE RECOGNITION SOFTWARE™ TRAIN

### Automatic Recognition of Train Noise

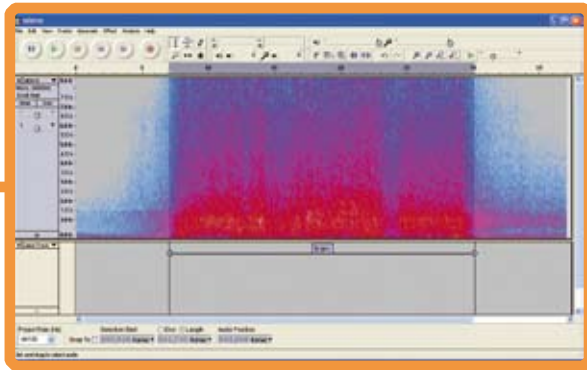
- 🚂 Unique solution on the market
- 🚂 High reliability (> 95%) without coercion sound level
- 🚂 Compatibility with existing measurement systems
- 🚂 Up to 20 times faster than real-time processing
- 🚂 Backup schedules
- 🚂 Easy to use
- 🚂 Batch mode



**Orelia Sound Source Recognition Software (OSSR) is a unique software suite intended to companies and organisations that need to assess, manage and inform about the impact of train noise in the environment.**

**Standard techniques perform global sound level measurement and do not provide sound source recognition on audio signal. This leads to incorrect evaluation of the real impact of train noise in the environment.**

**OSSR uses pre-recorded audio data and automatically extract the moment of appearance of the trains while rejecting other events.**



#### **Operation**

OSSR processes audio files coming from sound level meters. It outputs text file report indicating the schedules of recognized trains.

OSSR uses a proprietary technology coming from ORELIA's laboratory. This pattern recognition technology is able to recognize train from their spectral signatures.

#### **Characteristics**

OSSR processes mp3 files coming from any type of sound level meters (01dB-Metravib, B&K, Lochard, Larson Davis...) with audio recording function.

Output files are in standard XML and thus can be easily integrated into existing noise measurements databases and commercial noise evaluation softwares.

OSSR works with most Microsoft OS' (XP, Vista on PCs and can be installed on a server (Windows Server 2003 or Linux). OSSR speed depends on the processor used and requires only little memory.

Tested on an Intel Core Duo E6750 processor @2.66GHz (single core used), OSSR performs 20 times faster than real time.

#### **95% reliability**

Tested on thousands of sound files, OSSR provides more than 95% of correct detections, whatever is the sound level. Additional information on the correct detections measurement is available on our website, [www.orelia.fr](http://www.orelia.fr).

#### **Easy to use**

OSSR is suited for processing a large number of audio files. OSSR can be launched through contextual menu while selecting as many audio files as the user wants, through command line or through Audacity® audio editor. Options for inserting a date or transforming the output files format are also available.

OSSR is delivered with the sound file editor Audacity®. Audacity® provides visualisation and listening of both audio files processed and tag files with recognized trains.

#### **Batch mode**

OSSR is perfect for processing many audio files, thus saving precious time. With the batch mode available, OSSR processes the entire files contained into the same folder and save automatically the associated output files in the same directory.

#### **More**

OSSR can be evolved according to the user needs. For instance, we can provide: real time processing of the audio files, interfacing with user's databases, recognition of any classes of sound sources (cars, aircraft...)



Because of technical developments, ORELIA SAS reserves the right at any time and without notice to amend the technical characteristics announced this product and/or cease the manufacture thereof. 01dB-Metravib, B&K, Lochard, Larson Davis, Microsoft, Linux, Intel and Audacity are trademarks of their respective owners.