

SHORT PRESENTATION OF THE PROJECT NAMED COMPUTERIZED SYSTEM OF MONITORIZING THE POLLUTION THROUGH SOUNDS AND VIBRATIONS – ABBREVIATED – SICOMSUV

ARGHIR Mariana

Universitatea Tehnică din Cluj-Napoca

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Abstract: Through the project: „**Computerized system of monitoring the pollution through sounds and vibrations abbreviated SICOMSUV**” – provides methods and techniques of measure and check for the pollutants of sound and vibration types, as well as some tools for the informational technologies and communications that will give decisional support to help the local or regional authorities to take measures in order to reduce the acoustic pollution from urban agglomerations and to prevent the noxious effects on the human body.

The project was finalized by the implementation of an automat monitoring station of the noise and vibrations that can run a program of measurements and specific parameters evaluation. All the general objectives were achieved as well as the measurable ones too from the project:

1. The study of the specific European legislation in the fields of sounds and vibrations was made for the case of urban agglomerations for workability in the project;
2. The scientifically basis of the emission and propagation phenomena at general case and in particular of the sound waves was made;
3. The legislation from Romania on emissions, level, propagation and noise effects and vibrations on the environment and population has been studied;
4. The legislation of the EU on noises, vibrations and their effects on the on the people and environment has been studied;
5. The high performance measuring apparatus were purchased in order to process and store de information that were not yet purchased at previous stages;
6. A study was made on the way the monitoring system of the vibrations at urban agglomerations can be achieved, that was placed at Cluj-Napoca, at the intersection of the ZORILOR and GHORGHE DIMA streets near to the IPA building. This way the stealing was the components was avoided at the reading of the measurements was fast and continuous; The system of monitoring, management and reports will fulfill the following tasks:
 - o Graphical user interface
 - o Monitor configuration
 - o Data transfer from the fix stations to the database
 - o Data unload from the mobile station and storage to the database
 - o Manual data storage
 - o Administration and data reports form the database
 - o Export/import of data from the application that computes the ambient noise.
7. At UTCN a new laboratory was developed for homologation to specialization in the measurements of sounds at urban agglomerations and of vibrations that act on the human operator during the production process and not only.
8. A software was build to train the public (specialized people form the town halls);
9. Regions for the study of the noise were established at Cluj-Napoca city;
10. Sound measuring methods were established at the cities of Oradea and Braşov;
11. Sound and vibration measures were taken at Cluj-Napoca, Oradea, Braşov;
12. The structure of the software application was established in order to achieve the „noise maps” with the pollutions from Romania;
13. The digital maps of the studied regions were purchased for Cluj-Napoca;

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