ACOUSTICS2008/3118 Noise Metric - Environmental Noise Analysis Software

Milan Stojiljković^a and Vlado Delic^b

^aFaculty of Technical Sciences, Department of Environmental Engineering, Trg Dositeja Obradovića 6, 21000 Novi Sad, Yugoslavia

^bFaculty of Technical Sciences, Department of Tellecomunications, Laboratory for Acoustics and Speech Technologies, Trg Dositeja Obradovića 6, 21000 Novi Sad, Yugoslavia

Noise Metric software suite addresses the need for a modern low-cost acquisition, post-processing and analysis system that accommodates professional grade instruments used in typical environmental noise assessments. Software is designed to comply with national and international legislation and to provide a comprehensive overview of environmental acoustics theory in an interactive help file. Educational use is emphasized by providing measurement wizards and example case histories, with included demonstration measurement files for student self study. Acknowledging tight student financial budgets, the system is not limited to use with professional grade equipment. It can be configured for less expensive and less precise operation by providing integration with standard PC sound boards and low-cost microphones. Current beta version focuses on community noise and traffic noise assessment, with future modules planned for occupational noise and basic acoustic calculations. Off line analysis module is supplemented by a real time module for recording and logging the measurements and a browser for viewing the analysis results, noise rating level calculation and report generation. Every attempt is being made to automate as many analysis tasks as possible and thus minimize the human induced errors in the assessment process. Preliminary product testing was successfully completed by comparison with proprietary software products.