

Technical FP7 INFORMATION DAYS for Transport Research

Project ideas of applicants

Call identifier	FP7-SST-2010
FP7 Theme	Theme 7. Transport (including Aeronautics)
Activity	AREA 7.2.4.1. Integrated safety and security for surface transport systems AAT.2010.3.1-2. Noise and vibration
Topic	Technologies for improvement of safety in transport motion
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Project idea, objectives, ...	<p>We are interesting in cooperation on following scientific questions:</p> <ol style="list-style-type: none"> 1) Development of Acoustic Noise Compensation System for vehicles. Microphones are established near an engine, wheels and other sources of noise. The DSP processor models transfer function of space from a source of noise to a driver. Processed and inverted acoustic signal is played inside car salon. It will allow to lower noise level without raising of a thickness and quantity of sound insulator layers. 2) Development and perfection of algorithms for refinement of a driver speech from a noise for accurate recognition of phrases (work in the noisy environment). 3) Development and perfection of algorithms for driver speech recognition with the aim of voice-activated control by car systems. 4) Development of compression algorithms for systems of video registration of surrounding conditions. The system is intended for constant videorecording of road conditions, actions of the driver and other drivers, and can be used with the aim of innocence proof at road accident. 5) Development of images processing algorithms allowing identification of pedestrians and bicyclists on a road. 6) Development of a system for traffic signs and a road marking recognition. 7) Researches in the field of localisation of sources of sound on the road in the conditions of the limited visibility and the complicated movement. <p>We are looking for Coordinator, scientists (Universities, Research Centers) and SMEs interested in development of these approaches with the aim of further cooperation and participating in FP7 proposal.</p>

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