ACOUSTICS2008/2240 sound perception of urban delivery trucks

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The study deals with the annoyance of urban delivery trucks noises. Sound sequences of two lorries were recorded during a typical delivery : a commercial one and a prototype specially designed to reduce sound emissions. Various sources could be heard during these sequences (engine, doors, hydraulic rear doors). These recordings (the duration of which being more than 5 minutes) were evaluated by subjects in a sound proofed room by two methods. The first one was a continuous assessment of sequences : the listeners had to continuously assess their annoyance by moving a cursor sliding along a five levels graduated scale (from "not at all annoying" to "extremely annoying"). The second one was an overall evaluation (using the same scale) of each event of the sequences (for example : the arrival of the truck, or the closing of the driver's door, etc...). The comparison of the results obtained from these two methods for both lorries will be presented, as well as the reduction of the annoyance could be realized on the prototype.