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Mapping urban noise quota generated by a transport service

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The paper refers to a recent noise mapping experience, regarding the determination of quotas generated by urban transport services in complex areas. The first results of this study have been presented at Euronoise 2006 in Tampere and at Transport Noise 2006 congress in Saint Petersburg. Now the study is completed. Italian Law established that noise levels produced by buses, coaches and trams, must respect noise limits of area and road buffers classification. Public and Private transport companies are directly requested to point out their specific contributions levels and action plans for the reduction of those levels. At the same time, data for 2002/49/EC Directive have to be collected by them and given to authorities in agreement with formats and standards. The original methodology of source analysis, noise mapping and action planning studied and experienced by the authors in the Florentine area, applies a multi-variable couple-checking algorithm for the optimal choice of critical sites, to the whole road network of each company, reducing the number of calculations and conducting measurement campaigns only for the chosen critical "pivot" scenarios. Noise contribution quotas, generated by bus and coach traffic on linear sources and road systems, have been investigated and considered in models.