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A guideline for prediction and control of noise in railroads
maintenance activities

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In railroads routine maintenance as well as emergency maintenance can be represented by the acoustic point of view as a system of classified yard activities, including catalogued single and grouped noise sources, that is moved along the tracks areas. RFI (Rete Ferroviaria Italiana), the Italian National Railway Company, has provided a guideline for the correct evaluation of noise impact on receivers surrounding the yards, which can be adapted to many situations fitting the specific national law and local regulations disposals about noise assessment, prediction and reduction in temporary activities. Starting from their long term experience, the authors have developed a method for the production of local reports on maintenance railroad yard activities based on the modelling of standard scenarios. Each machinery employed in yards (for superstructure laying or repairing, electric traction, etc,) has been measured and characterized as noise source or as part of a noise sources system (emission box). The noise propagation scenarios are then build using an MS Excel based adaptation software. This methodology represents the technical and procedural architecture of the guideline which provides materials for the management of all the different typologies of maintenance yards operating on the RFI railroad network.