Background

Traffic is an element of the modern society. Especially in urban areas, e.g. Berlin, there is a high level of traffic and as a result of this a high level of noise. This causes bad side effects for health of people. Therefore lots of noise reducing actions have been attempted. One attempt is to reduce the noise of rail vehicles during their drive through curves.

Nearly 30 percent of the traffic in Berlin is adduced by public transports. E.g.: caused by a high level of service. The providers of public transport are the S-Bahn Berlin GmbH and the BVG. Nearly 16% of the passengers of the BVG are carried by tram which means carrying 174.7 million passengers every year.

A great number of trams are type GT6 trams. The first GT6 tram is built in 1994. Some parts of the vehicle reach the end of their lifecycle, e.g. the gear box. Due to the age of these vehicles the distributor stopped the production of these parts. Thus, the BVG forced to find a way to keep their trams running and make some modifications in order to maintain them.

Subject of research

What is the influence of the usage of flange oilers at a tram on the appearance of noise? Which recommendations are the results of the evaluation of the measurement?

What is the influence of the modification on the tram GT6 respective the appearance of noise? Which recommendations are the results of the evaluation of the measurement?

Aims of the project

MUST BE	Participation at introduction into equipment of measurement *(estimated at 14th of May)*
MUST BE	Participation at first measurement *(estimated at 11th of June, including safety instruction)*
MUST BE	Participation at a second measurements *(estimated at 25th of June and at 31st of July)*
MUST BE	Participation at the presentation of the results *(at 16th of July, for German and English audience; part of everyone: three to five minutes of speech)*
MUST BE	Write a final report *(delivery of the printed version by the 31st of August at the latest, German and English version of report: part of everyone: write at least seven pages of text)*
MUST BE	Investigation of the current state of research
MUST BE	Attention handling of subject of research
SHOULD BE	Identify further demand of research
SHOULD BE	Specify recommendations for acting to reduce noise caused by trams
CAN BE	Create and conduct a survey for people who are affected by noise caused by trams
CAN BE	Interviewing experts to identify sources of noise at trams / infrastructure besides the attain of knowledge relating to recommendations for acting to reduce noise of tram