Abstract

This thesis will be a risk analysis of a RFID-system for a logistical application. The system works as follows: Around Karlstad in Sweden there are three new weighing machines for lorries. The load weight will be measured for the police to control overweight and for logistical reasons such as issuing invoices and optimising the supply chain. The lorries do not have to stop to be weighed. They have to drive slowly over the weighing machine, so the loss of time is minimal. The lorries will be identified via RFID-tags. So every time a lorry will be driven over the weighing machine, the identification number and the measured weight will be logged and send to a database. In the future it is planed to store the weight on the tag itself. The task is now to analyse the RFID-communication and the transmission to the database. The thesis will contain several parts. First RFID in general and how RFID will be used in the application-scenario will be described. Next sections will be about the security and privacy requirements and the risks in detail. Then possible solutions are outlined and concrete suggestions are presented. Finally a conclusion will be drawn, which will show that the application has a low level of security.