

This thesis deals with the option of substitution of malus surcharge on premium in a classical bonus - malus system with deductible. Firstly, we clarify the basic principles of bonus - malus systems, then we show how to model the expected claim amount of the insureds based on their characteristics and we explain how to correctly select values of premium discounts and surcharges in the classes of bonus - malus systems. Next we clarify the concept of deductible and introduce the technique of its application on these systems. Finally we show the practical application of deductible on two models of bonus - malus systems and we evaluate and compare the results.