Bachelor thesis deals with centrally planned economies and with methods of modelling of these economic systems. In its first part it generally describes problems of trying to model the centrally planned economy itself and it formally describes situation in which a comunist producer finds himself. It also presents a model of producer behavior that is particular for economies with central planning, encountered widely in practice and confirmed by empirical studies. In the next part, various ways available for planning centre to motivate/demotivate producers into passing true information concerning their production possibilities are presented. The final part tries to find answers to the question if it is possible to reform economic system in diraction to economic efectivity of society, but with preserved framework of central planning.