

The thesis concerns the mobile monitoring telemetry system and its implementation within the Armed Forces of the Czech Republic. The object of the monitoring system is to give commanders an overview based on the monitoring of biological and technical values of the current mental and physical state of their soldiers and with the help of alarm limits to warn of abnormal readings of the monitored values. The system should help prevent injuries caused by exhaustion and should improve the combat efficiency of the whole unit. The thesis goes on to describe the concept of the system as a whole and the alignment of each separate modul. The functionality of the system was verified through practical measurement. The results and findings throughout the thesis form the basis for the design of a second generation system and for modifications of the presented algorithms.