

## ABSTRACT

Thesis: 125 p., 18 fig., 18 tabl., 2 append., 43 sources.

DECISION SUPPORT SYSTEMS, MATHEMATICAL MODEL, CRITERIA OF QUALITY, ADEQUACY CRITERIA, COMPLEX CRITERION, AUTOMATED SELECTION.

In this work the problem of assessing the level of terrorist threat in Ukraine and methodology to define strategies for protection from terrorist attack are investigated. Also there is investigated the software for implementation the chosen methods.

Methods for assessing the risk of terrorism and terrorist statistic in Ukraine were analyzed and its features were defined. Based on this there was chosen the method to assess the level of threat for object and object categories in which the set of goals was separated. Also there was determined the criteria for choosing targets and estimated threat of terrorist attack.

The mathematical model for assessing threats of all objects from the categories, that cover all possible goals, and model for determining the optimal set of approaches to protect the object from a terrorist attack was elaborated.

The software is implemented using the C # programming language and allows you to load data and choose the category of object for which the user wants to find out the level of terrorist threat. Examples of application programs for assessing threats to specific sites and to determine strategies for protection were included.

Developed software was value-engineered and further directions of the research were set.