

Summary of Research Paper

Information system model for management of classified documents in a corporative network

Author: Mithat Nedzhati Mehmed FN: M - 21219, „Mathematical modeling in economics”

Supervisor: Veselin Tsenov Tselkov

The goal of the following research paper is to study the question of the management of classified documents in corporate organizations and to create a information system model for control of classified documents in a corporate network.

The tasks resulting from this goal are:

1. Investigation of the place of control of the classified documents in the general system of information security. Analysis of the work with classified documents in a corporate organization. Survey and analysis of the methods for formal description and processes analysis.
2. Creation of registration model and observation of operations with classified documents in a corporate organization.
3. Creation of information models (structures) of information system for registration of documents in a corporate organization.

In Chapter 1 we solve Task 1 which relates to survey and analysis of the control of the work with classified documents in a corporate organization and the methods for formal description. The scope of the problem is outlined and the main tasks required for the diploma are stated.

In the first chapter, we solve the first problem related to survey and analysis of the control of the work with classified documents in a corporate organization and the methods for formal description. We outline the limits of the problem and we formulate the basic tasks that this research paper solves.

In the second chapter, for solving the problem with the control of classified documents, we create Formal model of diary of classified documents and Process model for supporting the diary of classified documents in a corporate organization. The possibility for adequacy check of the model with E-networks is shown. We build the algorithm that describes the support of the diary within the model that is represented through graph-schemes; we formulate and prove the assertion for completeness and non-contradiction.

In the third chapter we propose particular information structures for diary of classified documents in a corporate organization.

In pursuance of some of the tasks in the research paper, the information structures of the informational system for control of the classified documents are created on the basis of a relational database:

The information structures of the informational system for control of the classified documents created on the basis of a relational database are implementation of the following models:

Formal Model of Diary - FlogM

Process model for maintenance of a Diary - LogB

The information structures of the informational system are organized in a model of a relational database.

The object models are implemented by defining the systems for management of classified documents in SCIS.