

STATEMENT
on the procedure for obtaining
educational and scientific degree “Doctor”
by

Candidate: Todor Veleв Veleв,

Dissertation thesis title: “Modeling and automation of standardized information security management systems“,

Scientific advisor: Prof. Nina Dobrinkova, PhD,

Scientific field: 4. Natural Sciences, Mathematics and Informatics,

Professional field: 4.6. Informatics and Computer Science,

Doctoral program: „Informatics“,

Department: Modeling and optimization, IICT-BAS.

This statement report has been prepared by **Prof. Hristo Nikolov Kostadinov, PhD, IMI-BAS**, as a member of the scientific jury for the current procedure for obtaining educational and scientific degree “Doctor” according to Order № 232/01.10.2025 г. of the director of IICT-BAS and decision of the scientific council of IICT (Protocol № 7 /24.09.2025 г.).

The statement report has been prepared in accordance with the requirements of the Act on Development of the Academic Staff in the Republic of Bulgaria, the Regulations for its implementation, the Rules for the Development of the Academic Staff of IICT-BAS.

1. Data on the doctoral studies, dissertation, abstract and publications

Author of the dissertation is Todor Veleв Veleв who is Ph. D. student at the department of Modeling and optimization in IICT-BAS. The scientific advisor of Todor Veleв is prof. Nina Dobrinkova from the same institute of the Bulgarian academy of sciences.

All the procedures related to the defense of the dissertation work are fulfilled.

In his dissertation Todor Veleв presents the development and validate of a model platform to manage and automate standardized information security management systems. The Ph. D. candidate covers the minimum national requirements under Art. 2b, para. 2 and 3 of the ADAS in the Republic of Bulgaria and the additional requirements of the Institute of information and communication technologies, BAS.

The abstract of the dissertation thesis consists of 44 pages in Bulgarian language and 41 pages in English. It reflects correctly the contents, results and contributions of the dissertation. The main scientific contributions of the dissertation are correctly and accurately presented in the summary.

From the presented documents it is evident that Ph. D. student Todor VeleV has written his thesis on the basis of the results published in three papers, two of them co-authored by his scientific supervisor and one is independent. One of the publications is published in a journal with impact-rank SJR, another one is in an international conference referenced in Scopus.

The results obtained in the dissertation and the related papers do not repeat similar from the previous procedures for the scientific degrees and academic positions. The presented documents show that plagiarism is not detected in the dissertation and the related papers.

2. Scientific contributions

The subject of research in the dissertation is a software product model - a complex platform that can model and automate any information security management system, built in accordance with an internationally recognized standard or standards in this field. A methodology for research and modeling of this platform is presented and, according to it, an analysis of the processes, determination of requirements and identification of the general characteristics of the system are carried out. The author's theory of a document matrix is proposed as a basis for operational management of an organization and company.

The main scientific contributions of the doctoral student Todor VeleV in the presented dissertation are:

1. An algorithm and methodology for research and modeling of an automated standardized information security management platform are proposed;
2. The author's theory of a document matrix is presented as a basis for operational management of an organization and a company;
3. An analysis of information security management systems is presented in aspects: Information security; Information security standards; Information security management systems (ISMS); IS software applications;
4. Work processes and flows that are subject to automation through the developed platform have been identified, defined and analyzed;

5. Functional and non-functional requirements are defined after research and analysis of data, user groups and information security standards;
6. The general characteristics of the system are identified, using heuristic methods;
7. A model of a complex platform for modeling and automation of standardized information security management systems has been developed. The model is based on monitoring, analysis and management of the document matrix, workflows and information flows and assets of the organization;
8. A platform architecture is proposed that is in line with modern requirements for modularity, automation, and standards compatibility.

The results presented above give me a reason to claim that the candidate Todor Velevev has in-depth knowledge of the Ph. D. thesis, and that his original contributions are sufficient to acquire the educational and scientific degree “Doctor of Philosophy”.

9. Conclusion

Having become acquainted with the dissertation thesis presented in the procedure and the accompanying scientific papers, and on the basis of the analysis of their importance and the scientific and applied contributions contained therein, **I give my positive evaluation and do confirm** that the dissertation presented and the scientific publications to it, as well as the quality and originality of the results and achievements presented in them, meet the requirements of the Act on Development of the Academic Staff in the Republic of Bulgaria (ADASRB), the Regulations for its Implementation and the Rules for the Development of the Institute of information and communication technologies, BAS for acquisition by the candidate of the educational and scientific degree “Doctor” in the Scientific field 4. Natural Sciences, Mathematics and Informatics, Professional field 4.6 Informatics and Computer Science. In particular, the candidate **meets the minimal national requirements** in the professional field and **no plagiarism** has been detected in the scientific papers submitted for the current procedure.

Based on the above said, I **strongly recommend** to the scientific jury to award Todor Velevev, the educational and scientific degree „Doctor” in the Scientific field 4. Natural Sciences, Mathematics and Informatics, Professional field 4.6 Informatics and Computer Science.

06. 11. 2025
Sofia

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