

To the Chairperson of the scientific jury,
according to Order No. 246/ 14.09.2022 of the Director of IIKT - BAS,
regarding the conduct of the dissertation defense procedure
for awarding the educational and scientific degree "doctor" to
Hristo Konstantinov Blidov

REVIEW

by Prof. Dr. Maria Slavova
from the Law Faculty of the University of St. Kl. Ohridsky"

Dear prof. Borissova,

By Order No. 246/14.09.2022 of the Director of IIKT of BAS, on the basis of Art. 4, para. 2 of the Law on the Development of the Academic Staff in Republic of Bulgaria and with the decision of the Scientific Council of IIKT, according to protocol No. 9/14.09.2022, in connection with the procedure for acquiring the educational and scientific degree "doctor" in professional direction 4.6. "Informatics and computer science", under doctoral program 01.01.12. "Informatics", concerning the conduct of the dissertation defense procedure for awarding the educational and scientific degree "doctor" to Hristo Konstantinov Blidov, with thesis "Intelligent Methods for Process Analysis in Justice Administration", I have been appointed as a member of the jury and should present a review of the dissertation work.

1. I have known Hristo Konstantinov Blidov since he was a law student at the Faculty of Law of the University of St. Kl. Ohridsky", and later - as a legal practitioner and doctoral student at IIKT of BAS.

In his professional practice, the doctoral candidate combines scientific and research activities in the field of informatics and law, which represents a favorable basis for innovative thinking and contributions in several scientific fields. This combination is due to his practical knowledge in the field of computer science and his expertise in all areas of law. The professionalism and practical experience of Hristo Konstantinov Blidov justify the positive assessment of his dissertation research, the grounds for which are manifested in the presented materials and documents in the procedure for the defense of his dissertation work.

2. For his participation in the procedure, Hristo Blidov presents a list of his scientific publications, six in total, published in the years of his postgraduate study.

The presented publications show the development of the doctoral student's scientific and professional interests, contain contributing elements, improve the existing knowledge in the doctrine of administration of justice through computer skills.

The conclusions made in the dissertation work and publications are based on the doctoral student's critical view of the state of science and practice in the legal domain on the issue and on the knowledge of the scientific literature that is correctly cited.

The review of the dissertation work shows that the doctoral student has devoted his scientific efforts to current problems of administration of justice with intelligent methods that ensure suboptimal resource allocations in the administration of justice on the basis of objective judgment, which is traditionally lacking in the field of research.

The main goal of the dissertation work is to analyze the processes in the administration of justice with the means of modern paradigms from the field of intelligent systems. In order to achieve the goal set in this way, tasks have been formulated, which in themselves contain an innovative approach when considering the state of administration of justice in our country. Among the tasks, it should be noted the aspiration to choose appropriate intelligent techniques for the analysis of the processes in the administration of justice and to apply the apparatus of Generalized Networks (OM) and the apparatus of Intuitionistic Fuzzy Sets (IFM) for the pairwise comparisons and evaluations of the behavior of the participants in the judicial processes.

Of particular interest is the application of approaches to justice analysis, such as the algebraic apparatus of indexed matrices, when it is necessary to apply algebraic operations over matrices of different dimensions and intuitionistic fuzzy sets as a mathematical tool for treating uncertainty. IRMs are used for pairwise comparisons and evaluations of the behavior of objects according to criteria, as well as for determining the values of correlation thresholds between the criteria and thresholds of acceptable error that are necessary in the decision-making process. Solving these tasks allows to proceed to the development of models of the phases of the judicial process, in their logical sequence - from regular to extraordinary court proceedings.

The dissertation is 154 pages long and contains 130 sources. The study was developed with the support of project No. KP-06-H22/1 "Theoretical studies and applications of the intercriteria analysis'.

The scientific indicators, compared with the minimum requirements for the educational and scientific degree "doctor", according to the Regulations for the specific conditions for acquiring scientific degrees and for holding academic positions in IKT of the BAS, are 48 points with a minimum

requirement of 30 points. The conditions of PPZRASRB and the Rules for the specific conditions of IIKT of BAS have been fulfilled.

3. The main significance of the research is in the application of intelligent methods for modeling processes in the administration of justice, which would distinguish the objective state of the object of the research from the inevitable subjective impacts in the field of public relations management through judicial acts. The use of applied aspects of computer intelligence, of decision theory, of information technology to build modern systems for the analysis and evaluation of complex processes and systems, such as the administration of justice, is the first scientific research of its kind, and it gives hope for overcoming vicious phenomena in the activity of the judiciary, by objectifying the elements of court proceedings.

The social significance of the dissertation research can be assumed, but the very fact that models of proceedings in the administration of justice have been derived creates an expectation for improving the state of a sensitive environment through resource planning in computing infrastructures, specifically social behavioral models of collective intelligence inspired by the parameterization of the algorithmic frameworks in the created models.

The purely legal chapter one of the research and the legal positions in the main chapter of the research - chapter three, are a necessary prerequisite for the essential activity of the doctoral student, which, due to its novelty in legal research, will also seek its reflection in legal thinking. The combination of two main methods of research, corresponding to legal and information science, bear the marks of unexpectedness for the legal view and the discovery of a starting point for the improvement of all types of procedural proceedings, although the doctoral student is limited only to civil procedural law.

A contributing feature of the work is the narrative in parentheses, which distinguishes it from the usual dissertation developments and gives it additional

topicality and polemic. Of note is the consistent analysis of the distinctive features of the individual phases of the process and the persistent parallels with existing similarities in other administrative and judicial proceedings.

On p. 133 of the dissertation, eight scientific and applied results are formulated, which represent an original contribution to science. The criterion for this is the novelty of the conclusions reached, their immediate applicability in the administration of justice and the objectivity of the analysis of the state of the research object.

Thus, the Generalized Network Model of the first phase of the first-instance proceedings of the general claim process, presented in fig. 3.2., p. 67, with 6 transitions, 22 positions and 4 types of cores: first-instance court, plaintiff, defendant and court papers is a successful attempt to express the characteristics of the proceedings.

The generalized network model of the second phase of the first-instance proceedings of the common claim process presented in fig. 3.4., p. 86, with 12 transitions, 32 positions and 3 types of cores: name and data of the plaintiff, name and data of the defendant, documents of the plaintiff successfully establishes the specifics of the proceedings.

The generalized network model of appellate proceedings from the general claims process presented in Fig. 3.6., p. 101, with 6 transitions, 23 positions and 5 types of cores: first-instance court, first-instance court performing a function different from the upper core, appellate court, appellant, appealed party brings out the features of the appellate proceedings and presents possible recommendations for the improvement of work of its participants.

The generalized network model of cassation proceedings from the general claim process presented in fig. 3.8., p. 113, with 5 transitions, 20 positions and 4 types of cores: appellate court, cassation court, defendant in the

cassation appeal, the Supreme Court of Cassation bears the true marks of the proceedings.

The generalized network model of the proceedings for annulment of an entered into force judgment, presented in fig. 3.10., p. 126, with 6 transitions, 23 positions and 5 types of cores: archive, court of first instance, plaintiff, petitioner, defendant, Supreme Court of Cassation points out the features of this extraordinary proceeding compared to the previous four models.

To the study of intelligent methods of administration of justice and the conclusion of the growth of the application of artificial intelligence, critical remarks can be made, which are a natural consequence of the objective changeability of matter, the continuous innovations that replace without reservations and reaction time the already complicated current institutes of procedural law and their application in practice.

The research perspective of the PhD student is undeniably useful because of the practical value of the findings. The designed models are based on analytical findings, which are a prerequisite for proposals with a view to the future law and the practice of its application.

4. The reflections of the doctoral student are undoubtedly a prerequisite for professional debates in the future and are a prerequisite for scientific activity by upgrading what has been achieved in the research. The application of the latest achievements in the field of designing highly efficient algorithms for data processing, allow the conclusions of the dissertation work to be used in the practical work of the court, the prosecutor's office, the executive and legislative authorities

The overall evaluation of the dissertation work, the abstract and the publications of the doctoral student is positive. The articles in the periodical are on current topics and lead to conclusions useful for the development of the doctrine.

5. On the basis of the presented analysis of the dissertation work, it should be concluded that the doctoral student and his research meet the criteria set forth in the special legal regulations and the requirements provided for in the Law on the Development of the Academic Staff in the Republic of Bulgaria for obtaining the educational and scientific degree «doctor».

In view of the contributions of the dissertation work and the professional activity of the doctoral student, I recommend the jury to make a decision to award the educational and scientific degree "doctor" to Hristo Konstantinov Blidov.

01.11.2022

Sofia,

НА ОСНОВАНИЕ

331А