



OPINION

**by Veselina Kuncheva Bureva
from "Prof. Dr. Assen Zlatarov" University
on the Thesis of Aleksander Janusz Kacprzyk,
entitled "Design of a software system for managers' remuneration using
Generalized Nets"**

**Submitted for awarding the educational and scientific degree "Doctor of
Philosophy" in the doctoral program "Computer systems and technologies",
Professional field: 5.3. "Communication and Computer Technologies"
under the Scientific Field 5. Technical Sciences**

The Opinion was prepared according to Order No. 71-A from May 20, 2020 by the Rector of the University "Prof. Assen Zlatarov" - Burgas, Prof. Magdalena Mitkova, Art. 44 of the Rules on the Terms and Conditions for Acquisition of Academic Degrees and Occupation of Academic Positions at the University "Prof. Assen Zlatarov"- Burgas, in connection with a decision of the Faculty Council of the Faculty of Technical Sciences for the student on self-study Aleksander Janusz Kacprzyk for awarding the educational and scientific degree "Doctor of Philosophy" (PhD), with scientific supervisors - Corr. Member Prof. Krassimir Todorov Atanassov, DSc, DSc and Prof. Bratoy Georgiev Koprinarov, PhD.

As a member of the Scientific Jury I have received:

- 1) Order No. 71-A from May 20, 2020, by the Rector of the University "Prof. Assen Zlatarov" - Burgas, Prof. Magdalena Mitkova.
- 2) Abstract of the dissertation for the educational and scientific degree PhD.
- 3) Dissertation for the educational and scientific degree PhD.
- 4) Autobiography of Aleksander Janusz Kacprzyk.
- 5) Copies of the publications included in the PhD thesis.

1. From the presented Curriculum Vitae, it is seen that the candidate was born on August 1, 1972, in Warsaw, Poland. In 1996, he defends master degree in the University of Minnesota, US, and the High Economic School of Warsaw, and in 2001 a master degree from the Massachusetts Institute of Technology, US. From 1996 to 2003, he worked as a consultant for the McKinsey & Company, Warsaw, from 2003 to 2007 he was Savings

Director in the company Enterprise Investors, Warsaw, and as of 2008 he has been with The Carlyle Group, as Director for Central Europe.

2. The dissertation thesis of Aleksander Kacprzyk is 152 pages long and consists of five chapters, conclusion containing the contributions of the thesis and directions for future research work, a list of 8 publications on the dissertation thesis, declaration for originality and a bibliography comprising 124 titles.

Without elaborating in details the content of the dissertation thesis, I will outline its most significant contributions, in my opinion.

Chapter 1 is introductory and it formulates the goal and tasks being solved in the thesis. The second chapter discusses the executive personnel compensation in companies set in highly competitive business conditions. In the third chapter the concept of "generalized net" is introduced and a theoretical analysis of the tool is presented. The original description of the problem, starting with the description of systems with discrete events, makes a very good impression. For the first time, an informal introduction to the theory of generalized networks is presented. Chapter 4 plays the central role in the thesis. It discusses the compensation models of the company executive staff and their roles in achieving the company goals. The so described processes are presented in terms of a generalized net model. On the basis of the results produced by running the model, in the fifth chapter two examples are given for determining the executive staff's compensations in two particular companies. Chapter Six is a form of concluding remarks and directions for future work. The structuring of the dissertation is at a good level.

The synopsis reflects adequately the contents of the dissertation thesis, and meets the requirements of the Academic Staff Development Act of the Republic of Bulgaria.

I accept the contributions formulated by the PhD student.

3. From the applied reference, it is seen that Aleksander Kacprzyk has been the author of 8 publications related to his dissertation thesis. Three of them are communications in front of international workshops on generalized nets, two of which – in 2007 and 2013 – were held in Bulgaria, and one in Great Britain (2012); two papers in a Polish journal, one paper in an international journal published in Bulgarian, one in an international journal with SJR-factor and one paper in an international journal with impact factor. I would observe that all papers are published in journals and proceedings closely related to the theme of the dissertation thesis.

The requirements of the Law for development of the academic staff in the Republic of Bulgaria and its regulations are fulfilled, as well as of the Regulations for the conditions and the order for acquiring scientific degrees and holding academic positions at the University "Prof. Dr. Asen Zlatarov ". All of the above justifies my confident positive evaluation of the dissertation thesis and the materials presented alongside, and to recommend the honourable members of the Scientific Jury to vote for awarding Aleksander Janusz Kacprzyk the educational and scientific degree "**Doctor of Philosophy (PhD)**" in Professional Area **5.3 "Communication and Computer Technologies"**, Scientific Specialty "**Computer Systems and Technologies**".

Подпис заличен
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03 July 2020

Opinion written by:
(Assoc. Prof. Veselina Bureva, PhD)