

New Bulgarian University

POSITION

By Prof. PhD Ivo Velikov Velikov

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Professor at the Higher School of Security and Economics

Higher Education Area: 9. "Security and Defense"

Professional area: 9.1. "National Security"

for the dissertation developed by Prof. PhD. Nikolay Stefanov Radulov on the topic:
"Technological and digital transformations in security. Security 4.0 "presented for the
doctorate degree (Dr off Science) in Higher education area 9. Security and defense,
Professional field 9.1. National Security, in the Program Security Strategies and Policies.

Sofia

2020

1. SIGNIFICANCE OF THE RESEARCH PROBLEM IN SCIENTIFIC AND SCIENTIFIC APPLICATION.

The importance of dissertation work for the security system is undeniable. There are similar developments (eg Science and Technology of Terrorism and Counterterrorism, 2009 by an author team of 4 researchers, or research by Prof. I. Savov in the field of contemporary impersonal connection), but in terms of complexity, scope and at the same time with this abstractness / concreteness of the research, the author has the right to claim originality and uniqueness of his work.

I also consider the relevance to be proven - transnational crime controls criminally or legally between 1/3 and up to almost 50% of world gross output, but while 50-60% of conventional crimes are most commonly detected, cybercrime is 4% (according to on page 22 and page 56). That is, along with the grounds for development, such as the huge sums and power of criminal gangs, the author skillfully suggests some significant trends and challenges to the environment that give rise to this work:

- The contradiction between the explosive development of technology and the archaic fight against crime;

- The interdisciplinary nature of the fight against crime requires new projects from experts in various fields of science ("Cybercrime, cybersecurity and cyber intelligence are interrelated industrial-social phenomena" - p.18);

- Offers ready-made models and algorithms for security executives and experts, incl. in scientific institutions;

- Binds management science to technical disciplines with experience and creativity, considering in the new light of technology 4.0 our well-known operational theory in almost all its aspects;

- the benefit / threat dyad of the widespread use of new technologies presents as clearly as possible the challenges of our time facing the services;

- The practical merit of a large part of the content - the texts for examining job applicants, for training in a virtual environment, for contacting collaborators in general and today - are of great value (with more or less effort by the services, of course).

I believe that the topic of the study is fully consistent with the main content of the text.

2. JUSTIFICATION OF THE OBJECTIVES AND TASKS IN THE DISSERTATION WORK.

In formulating the purpose and objectives, Prof. Radulov has fully complied with the requirements for these attributes in a dissertation. They are clear, interconnected and present the main directions of creativity and the development of ideas subsequently in the text.

I agree that the purpose and the research tasks have been fulfilled. My reasons for this assessment:

- A sufficient volume of dissertation work of 378 pages, although some parts may be considered more extensively;

- Obvious competence of the author, evident from the use of clear terminology, both professional in the field of security and scientific;

- A sufficient volume of literature - 176 sources characterized by novelty - I have practically not found a source older than 2006, with Internet sources being discoverable and available;

- In structural terms, the parts of the text in which the research tasks are solved can be traced slightly;

- An impressive number of footnotes have been made to help understand the text.

The structure of the paper consists of nine parts, including an introduction, a conclusion, a bibliography and a list of keywords.

In the introduction, Prof. Radulov correctly defined the relevance of the research problem, the purpose, the tasks, the object and subject of the research, the limitations (I always consider the correct indication of the limitations as an expression of scientific maturity), as well as the methodology used.

The dissertation work meets the requirements of BDS ISO 7144: 2011 "Designing Dissertations and Similar Documents".

From the dissertation and the abstract to it the author's contributions and the results of the independent scientific research become clear.

3. CONFORMITY BETWEEN THE METHODOLOGY AND RESEARCH METHODS SELECTED, THE SUBJECT AND OBJECTIVES OF THE DISSERTATION WORK.

One of the merits of the dissertation is the correct selection of scientific methods, which the author in his introduction and in his abstract has thoroughly explained, both the reasons for them and the variants and combinations of their use.

I believe that the chosen methodology and methodology of research is in full accordance with the stated purpose and tasks of the dissertation.

4. SCIENTIFIC AND SCIENTIFIC CONTRIBUTIONS OF THE DISSERTATION WORK (DESCRIPTION AND EVALUATION), INCLUDING THE ORIGINAL CONTRIBUTION TO THE SCIENCE.

The PhD student's scientific contributions can be found in three main areas:

- Theoretical developments in science (eg definition of concepts),
- Developing and enriching existing knowledge (eg in operational theory and practice),
- Adaptation of scientific achievements into practice.

I fully accept the doctoral student's contributions. Claims may be made on their formulation itself.

The dissertation contains theoretical summaries and proposed solutions to a large scientific and applied science, and at the same time little studied problem. The results achieved by Prof. Dr. Radulov represent his original contribution to security science.

5. ASSESSMENT OF DISSERTATION LABOR PUBLICATIONS.

On the dissertation topic, the doctoral student presented eleven publications. They reflect the main points of the dissertation and directly correspond to the topic of the dissertation. Judging by the first of these - in 2016, the author has a lasting and consistent interest in the subject for at least 4 years.

6. COMMENTS, RECOMMENDATIONS AND NOTES.

Critical notes may be made to the dissertation, which do not change my overall positive assessment of it:

- I believe that the thesis is a statement, an opinion, but it is not a scientific construct, it would be correct to raise a hypothesis, which is then proved by scientific means;

- I would replace part 6 (the threat of crime 4.0) after part 4 - "The environment...", as is the traditional construction, our forces and means remain the last (even in the formulation of objectives in the introduction there is a similar sequence);

- There are some rather colloquial and unscientific expressions and phrases that require more careful editing;

- Attempting to increase the scale and scope of work leads to some "overlook" on some elements.

I know Prof. Dr. Radulov from several scientific symposia, incl. and his reports and publications on the topic. I believe that he is a competent and well-established researcher in the field of national security, possesses deep knowledge and ability to work independently. Due to my professional career and the number of publications, I believe that the dissertation is a personal work of Prof. Radulov.

7. CONCLUSION WITH A DIRECTLY POSITIVE OR NEGATIVE ASSESSMENT OF THE DISSERTATION WORK.

The dissertation submitted is a complete and completed scientific work on a specific scientific problem, which meets the requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria and the Regulations for its implementation.

I express my positive opinion and propose to the Honorable Scientific Jury of Prof. PhD. Nikolay Stefanov Radulov to be awarded the degree of Doctor of Science in Science Area 9. Security and Defense, Professional Field 9.1. National Security.

04/01/2020

Member of the Scientific Jury:

(Prof. PhD. I. Velikov)