



**НОВ
БЪЛГАРСКИ
УНИВЕРСИТЕТ**

STATEMENT

by

Prof. Dr. Nenko Georgiev Doykov, director of a laboratory for Specialized Risk and Security Studies – Department of National and International Security – NBU.

Higher Education Area: 9. "Security and Defense"

Professional Field: 9.1. "National Security"

for the dissertation developed by Prof. Dr. Nikolay Stefanov Radulov on the topic: "Technological and digital transformations in security. Security 4.0" presented for gaining a doctorate degree in the area of higher education 9. Security and defense, professional field 9.1. National Security, in the Department of National Security Strategies and Policies.

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1. SIGNIFICANCE OF THE RESEARCHED PROBLEM IN RELATION TO ITS SCIENTIFIC APPROACH AND APPLICATION.

By doing a reference check on the topic, I was unable to find any significant research that has been undertaken on the presented dissertation, therefore I accept the conclusion made by Prof. Dr. Radulov **that the topic of the problems of high-tech and digital and technological security transformations has not yet been addressed anywhere in the world. This makes this research not only vital but a highly promising strategic product as well.**

In this regard, the significance of the problems posed by the construction of the new model, the current state and the prospects of implementation in the security of a new quality toolkit, that will fulfill requirements on a global level, considered from the standpoint of Industry 4.0, are obvious and unnecessary to argue any further.

From this point of view, the choice of a dissertation research topic which uniquely addresses the problems associated with identifying those aspects of the high technology and digitalization that would contribute to achieving sufficient security for the population in a rapidly developing technological world is successful and of great scientific and practical importance.

I believe that the research topic is fully in line with the main content of the study.

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

Prof. Dr. Radulov's approach to formulating the purpose and objectives of the study is professional and extremely innovative as well.

The author defines his research objectives as follows:

1. Exploring the relationship between the technological revolution, the consequence of Industry 4.0 and security, defining the concept of Security 4.0;
2. Identification of new technologies that can be used in the security sector;
3. Analyzing the threats to citizens' security and national security as a possible result of the use of the latest technological tools and their application by criminal circles. Identification of current technological crimes;
4. Modeling existing and future opportunities to build a security ecosystem that meets today's challenges.

The author has done an excellent job in formulating the research objectives.

My reasons for this assessment are as follows:

The dissertation is with the impressive volume of 379 pages.

In terms of structure, the work consists of nine parts, including an introduction, a conclusion, a bibliography and a list of keywords.

An impressive number of footnotes were made – 213.

In the introduction, Prof. Dr. Radulov correctly defined the relevance of the research problem, the purpose, tasks, objects of the study, the limitations, and the methods used.

I commend the technical implementation of the dissertation, which is well edited and distinguished by the analytical and logical nature of the presentation.

It shows the high professional and scientific training of the doctoral candidate.

The dissertation work fully complies with BDS ISO 7144: 2011 "Presentation of thesis and similar documents".

In developing his research, Prof. Dr. Radulov has fully complied with BDS 17377: 1996 concerning the bibliographical citation of the various sources used.

It is worth noting that the dissertation research is designed to give a clear idea of the author's contributions and the results of the independent research.

3. COMPLIANCE BETWEEN THE METHODOLOGY AND RESEARCH METHODS SELECTED AND THE TASK AND OBJECTIVES OF THE DISSERTATION WORK.

In the process of developing the dissertation, Prof. Dr. Radulov, in solving these tasks, uses a number of combined methods, in particular: analysis, synthesis, deduction, the inductive method, comparison and adaptation.

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

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

The proposed dissertation work by Prof. Dr. Radulov is in full compliance with the requirements for obtaining the Doctor of Science degree of the ZRASRB, the Rules for its application and the Regulation for the development of the academic staff at NBU.

The scientific contributions of the doctoral candidate can be found in three main areas:

- Novelty in science,
- enrichment of existing knowledge
- adaptation and application of the scientific achievements in practice.

I fully accept the major contributions claimed by the doctoral candidate.

The dissertation contains theoretical generalizations and suggested solutions to a large scientifically applied but less studied problem.

I believe that the scientific results achieved in the dissertation enrich the existing knowledge in the scientific specialty "Organization and management outside the field of material production" and other scientific fields, and the results obtained by Prof. Dr. Radulov make a significant and original contribution to the science of security.

5. ASSESSMENT OF PUBLICATIONS OF THE DISSERTATION.

I believe that the publications cited are of the required volume and allow the results of the research to be widely disseminated. They reflect the main scientific contributions made in the dissertation.

Their analysis shows that they largely reflect the studies carried out and the results obtained.

Judging by the competence of the doctoral candidate presented in the dissertation and considering that Prof. Dr. Radulov has eleven publications, it can be reasonably concluded that the dissertation is personally made.

6. OPINIONS, RECOMMENDATIONS AND NOTES.

I have no critical notes or recommendations.

During the discussions at DNMS I had the opportunity to make my recommendations and I am satisfied that many of them were implemented in the dissertation research.

The merits of the dissertation work are obvious.

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

The submitted dissertation is a fully completed research with an innovative character.

Based on the comprehensive analysis of the achieved scientific and applied scientific results in the dissertation presented by Prof. Dr. Radulov on the topic: "**Technological and digital transformations in security. Security 4.0**", I declare with complete conviction my "**POSITIVE**" assessment and propose to the distinguished Scientific Jury to award the degree of Doctor of Science to Prof. Dr. Nikolai Stefanov Radulov in the professional field 9.1. National Security.

07.04.2020г.

Member of the Scientific Jury:
(Prof. Dr. N. Doykov)