

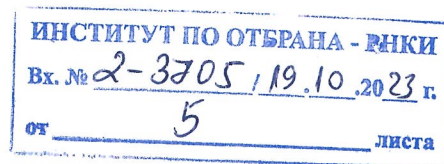


## MINISTRY OF DEFENSE

### **DEFENSE INSTITUTE „PROFESSOR TSVETAN LAZAROV”**

Sofia 1592,,Professor Tsvetan Lazarov” blvd. № 2, fax: 02/92 21 808, <http://di.mod.bg>

## STATEMENT



by Associate Professor Doctor Zarko Ivanov Zdravkov, Defense Advanced Research Institute, National Defense College "Georgi S. Rakovski", Sofia 1504, Evlogi and Ilisto Georgievi Blvd., No. 82, phone. 02 92 26514

according to the concourse for the occupation of an academic position "associate professor" for a civilian employee, in the field of higher education 5. Technical sciences, professional direction 5.3. Communication and Computer Technology (Communication networks and systems), at the Defense Institute "Professor Tsvetan Lazarov", announced in the "State Gazette", issue 61/18.07.2023 in accordance with the Order of the Director of the Defense Institute No. 288/04.07.2023

with the candidate:

Dr. Eng. Grigor Raykov Velev, former Director of the Directorate at the Defense Institute "Professor Tsvetan Lazarov".

## 1. General characteristics of the candidate's scientific-research, scientific-applied and pedagogical activities

In the announced concourse for obtaining the scientific title "associated professor", the candidate presents 32 (thirty-two) works, of which monographs - 2 (two), articles and reports - 19 (nineteen), and 11 (eleven) are studies and scientific projects with results; technical-economic reports, tactical-technical assignments, work projects and methodologies. Of the 17 (seventeen) publications submitted for review, 9 (nine) are independent, 12 (twelve) are in Bulgarian, and 5 (five) are in English.

Published researchings are in the field of defense communication and information technology, specifically, mobile self-organizing networks, sensor networks, and automated information systems for decision support in disaster and emergency response. The main scientific and applied results of the candidate are the performed analyzes and proposed models and methods for creating and using mobile self-organizing networks, routing and the acquisition of sensor data to support decision-making. His developments related to the design and construction of stationary communication systems in the interest of the Ministry of Defense and the Bulgarian Army (BA) can be defined as applied results.

The set goals, solved tasks and achieved results in the developments of Dr. Eng. Velev define him as a researcher and implementer.

## 2. Evaluation of the candidate's special training and activity

The candidate has 23 (twenty-three) years spent on management positions at the Defense Institute "Tsvetan Lazarov". He is the head of a program team performing system analysis and design of subsystems and systems in the field of construction and development of communication and information systems and of a program team for the development and expansion of Strategic Command of Forces on the Bulgarian Army.

During this period, he acquired 1 (one) postgraduate qualification and a

number of certificates from completed courses, the most important of which are: "Strategic course. Performance of management positions in the system of national security and defense", VA "G.S. Rakovski", Sofia (2011), "Training Course for Network Managers", Electron Progress, Sofia (2005), "SDH 1660 SM Operation Course and Management 1320", Alcatel, France (2004), "Digital Communications Course", College of Telecommunications and posts, Sofia (2001), "Course on working with SDH, PDH, SRAL radio systems and EM-OS control systems", Italtel Sistemi, Italy (1998) and Course on the specialty "Installation, operation and combat use of tropospheric and radio relay stations" , Ulyanovsk, Russia (1987).

The scientific production developed over the years and affirmed in practice is accompanied by active research and implementation experience, which is proven by his participation in 7 (seven) international, 5 (five) national, departmental (technical and systemic) scientific projects.

I consider that the candidate has the professional, research, entrepreneurial and personal qualities to occupy the academic position of "associate professor" under the announced concourse.

### 3. Main scientific results and contributions

I accept the claim for the contributions proposed by the candidate as substance and application, but I do not accept their wording through the classification made in the author reference. The nature of the contributions is not defined in a rigorous scientific style.

I define the obtained results and contributions as:

– Enrichment of existing knowledge: the two monographs (II.1.1, II.1.2), analyzes and/or classifications (II.2.2, II.2.6), publications of original models (II.2.5, II.2.7, II.2.10, II .2.12); publications of solutions and approaches (II.2.1, II.2.15);

– Application of scientific achievements in practice: articles (II.2.3, II.2.4, II.2.8, II.2.9, II.2.11, II.2.13, II.2.14, II.2.16, II.2.17).

Of the 21 (twenty one) publications presented (monographs – 2 (two), articles

and reports – 19/17 (nineteen/seventeen for review), the candidate is the sole author of 10/9 (ten/nine for review) of them, first author in 1 in (one) paper, second in 3/2 (three/two to review), fourth in 1 (one) and sixth in 1 (one), which proves his personal authorial contribution and his ability to work as a part of a team.

#### 4. Evaluation of the significance of the contributions for science and practice

The candidate has applied his knowledge, skills and scientific achievements in the development of 7 (seven) international, 5 (five) national, departmental (technical and systemic) scientific projects. A list of 19 (nineteen) citations is presented, 2 (two) of which in scientific publications, referenced and indexed in world-renowned databases and 17 (seventeen) in collective volumes with scientific review.

#### 4. Critical notes on the presented works

Regarding the candidate's research work and scientific production, I have only one essential recommendation for his future work - to be more active in publishing the scientific and scientifically applied results obtained by him in publications with an impact factor or impact rank.

#### 1. Conclusion

With the presented scientometrics of 480 (four hundred and eighty) total points from the groups of indicators in the list of scientific activity, Dr. Eng. Grigor Raykov Velev exceeds the required 400 (four hundred) points of the minimum national requirements. The nature and content of the scientific publications presented by the candidate in the concourse and the attached documentation fully meet the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Regulation for its Implementation in its part for scientific production with contributions and applicability in the research and teaching process for employment of the academic position "associated professor" in the field of higher education 5. Technical sciences, professional direction 5.3. Communication and computer technology (Communication networks and systems).

## 2. Evaluation of candidates

Based on the analysis of the presented scientific works, their significance, the scientific, scientific-applied and applied contributions contained in them, I give a positive assessment of the scientific activity of Dr. Eng. Grigor Raykov Velev. Considering this, I recommend to the respected members of the scientific jury and the respected members of the scientific council of the Defense Institute to vote for the award of the academic position "associated professor" in the field of higher education 5. Technical sciences, professional direction 5.3 Communication and computer technology (Communication networks and systems) of Dr. Eng. Grigor Raykov Velev.

Member of the jury:

Date 23.10.2023

Assoc. Prof. Dr ...../S/.....  
(Z.Zdravkov)