

Scientific Knowledge in the Field of Security - Problems and Solutions

Prof. Stoyko Stoykov, Assoc. Prof. Vanya Dimitrova*

Vasil Levski National Military University, Veliko Tarnovo, Institute for Scientific Research and Innovation, Bulgaria

*Corresponding Author: Vanya Dimitrova, Vasil Levski National Military University – Veliko Tarnovo, Institute for Scientific Research and Innovation, Bulgaria, Email vanydim@abv.bg

ABSTRACT

University education, especially in master's and doctoral programs, is unthinkable without active research. The introduction of new interdisciplinary scientific disciplines, as well as the capacity of non-university research organizations to prepare young scientists, should be encouraged. Bulgaria needs to make significant efforts to change the situation in the security system by increasing the interest in research at higher education institutions, creating conditions for the modern generation of modern knowledge and preparing the new generation of scientists.

Keywords: Education; Science, Security.

The best way to predict the future is to create it!

Broadband and multi-profile in its development, Europe has declared its willingness to become the "most competitive and dynamic knowledge-based economy in the world" by increasing and supporting leadership in key areas of today's society, through public investment in higher education as a top priority. The aim is to ensure that higher education institutions have the necessary scientific and educational resources to achieve their goals to create and maintain an extensive modern knowledge base and stimulate research and innovations.

The Bologna process, which leads to greater compatibility and comparability of systems in the European Higher Education Area, is ensured through reforms of national higher education systems and policies based on the European values of institutional autonomy and academic freedom. One of the main topics in joint research is the security of society, where the common vision is to develop national programs and national technology platforms to ensure the full realization of national and European scientific potential in the field of security through effective cooperation between academic science and consumers.

Accelerating the emergence of new knowledge, innovation and advancing research into high technology sectors and strategic technologies, leading to increased productivity and

strengthening of competitiveness, can be achieved by:

- Strategic and operational guidance on the renewal of education and training systems and curricula in the EU;
- Defining education and qualification programs of the future;
- Sharing and transfer of knowledge
- Educational and training systems modernization.

As security knowledge is highly specialized and dispersed, it is necessary to build multiple, mostly horizontal, connections between people, institutions and organizations for its grouping, preservation, dissemination and implementation in practice. These links should cover not only the sphere of information and communication technologies, but also all the others - the business, the academic community, the government, the society as a whole¹. The pooling of knowledge creates enormous potential, but it is not enough to turn it into useful, usable knowledge. Experience and skills are needed to process and use it. The World Bank proves the link between economic development and knowledge and follows the process of turning a discovery into a

¹Stoykov.St.Dynamics of the security education and training environment..Dissertation Vasil Levski“ NMU, 2017.

product into its analytical model for the four pillars of the knowledge economy. These are the innovation system that creates the new knowledge; the institutions that collect it and make it good; well-trained workforce and information and communication technologies that store and distribute it.

Since the main characteristic of modern production is the presence of a component of knowledge in every good (commodity or service), this inevitably affects the structure of the value of each product intended for sale. The concept is the means that increases the potential of the factors of production, including the human factor.

In the context of rapidly changing economic environment, knowledge is becoming a major resource determining the effective functioning of all other spheres. In the context of this new concept and its future, Bulgaria must find the mechanism to integrate into the fastest-growing economies in the world. This can only be done if the government, business and society not only make demands but also take on the respective responsibilities and measures for the successful development of the knowledge economy. The creation of the National Strategy for Research in the Republic of Bulgaria supports the continuation of the traditions for the development of our century-old national values - science and education deeply rooted in our national spirit and culture and would contribute to the integration of Bulgaria into the developed European countries where science is national value that satisfies the spiritual needs of society and contributes to the increase of its prosperity, security and sustainable development.²

The first one measure the efforts of each country to build a knowledge-based economy, taking into account the two main aspects of investment in research. The first indicator takes into account the creation of new knowledge and the dissemination of this knowledge. Unfortunately for Bulgaria, there is insufficient data to assess its position with respect to other European countries and the answer may be in the reluctance of ministries and government administrations to engage in scientific work and the lack of scientific interest in them.

The second indicator measures the achievements of each country in building a knowledge-based economy. It includes: total labor productivity

²European Commission - „strategy and information-
http://ec.europa.eu/environment/index_en.htm

(GDP per working hour); achievements in science and technology (patents and publications); the use of information infrastructure (e-commerce); the effectiveness of the education system (learning success).

Bulgaria's position, according to this indicator, compared to other EU countries and those in the process of accession, shows not only a low overall level, but also a negative growth that has led to an alarming increase in the lag.

Not only is the share of young people in the third cycle of doctoral studies in Bulgaria very small. Considerably less favorable is the case for the preparation of young scientists through PhD.

The data show that no more than half of those enrolled in the PhD programme can reach a dissertation defense. This means that the organization of this activity needs to be seriously rethought in order to avoid wasting means and to ensure the reproduction of scientific potential. Otherwise, Bulgaria remains out of the board in building a knowledge-based society - the declared EU common goal.³

It is obvious that Bulgaria needs to make considerable efforts to change this situation by raising the interest in research at higher education institutions, creating conditions for learning indiscriminately, but of modern knowledge of the younger generation and preparation of the new generation of scientists.

University education in the field of security, especially in master's and doctoral programs, is unthinkable without active research. The introduction of new interdisciplinary scientific disciplines, as well as the capacity of non-university research organizations to prepare young scientists, should be encouraged.

The modern infrastructure which serve the scientific work - libraries, computer networks, information processing centers, the establishment and development of a national information network for research, modern communications, access to scientific information and opportunities for joint research are particularly important for effective scientific work. To evaluate the results achieved, it is proposed to apply the following indicators successfully used in good European practices:

³Stoykov .S., Strategic knowledge management in the security and feedback system. Monograph. Institute of Knowledge Society. S., 2012. ISBN - 978-954-92879-1-2

Scientific Knowledge in the Field of Security - Problems and Solutions

- Ratio of inputs to released scientific products;
- Number of registered and maintained patents;
- Publications;
- Assigned licenses;
- Number of PhD students;
- Number of invited foreign professors;
- Number of newly built dynamic research units;
- Number of additional qualified administrative and scientific potential;
- Number of successful projects in the framework and other international scientific programmes with national participation;
- Renewed infrastructure;
- Networks built between research units and small and medium-sized enterprises;
- Number of new spin-offs;
- Degree of improvement of the age profile of the research potential;
- The number of recognized scientific periodicals in the field of security issued in Bulgaria;
- Number of security transfer units created.

Only careful reading of these indicators by all heads of Higher Education Institutions and representatives of ministries and agencies, which are directly responsible for a successful national educational and scientific policy in the field of security, allows very clearly finding our place and the discrepancy between declared desires and achieved results.

Multi-directional and fast-paced changes in today's integrated security environment and the need for a rapid and effective response to the security and defense system require that the core process of its activity be structured into a twin-track curriculum. Regular reviews of the set of manageable variables, the formation of new strategies for their management and the detailed reporting of changes in the consequences are mandatory.

This allows, on the basis of information-provided and science-based solutions in the second outline, the security and defence system management to address appropriately the responses of the system in case of changes in the security environment.

National security needs to be studied, and learners must have the incentives to do it as thoroughly as it is worth and is paid. A system for studying national security is needed - permanent and "lifelong". In network time, unlike a hierarchical one, there is no such concept - "I know something once and for all, and it will provide me with work and service all the time."

Strategies based not on resources but on goals, are no longer looking for such tasks that fit our knowledge, but are looking for such knowledge that responds to the tasks to be solved by the security system.

LITERATURE

- [1] Angel Baltov, Associated Member of the Academy of Science "The Attractiveness of the Scientific Career", Bulgarian Debates-National Forum for Science, Sofia-2009.
- [2] Dimitar Yonchev, Nikolay Slatinski, "White Paper on Civilian Control in the Armed Forces 1990-1997", S., Democracy and Security Foundation, 1998
- [3] John Stewart Mill - "Utilitarianism" -<http://www.sns-tmpoenm.org/node/220>
- [4] M. Stoykov "Transformation of the Security System Characteristics", Military Journal, C.2009 / 1.
- [5] P. Angelov "Strategy for Public Product Security and Defense" Sofia, Scientific Conference "Security and Protection-2009".
- [6] Nikolov S. "The Scientific Challenges - Facing the Current Problems of Security and Future Challenges", BA "GSRakovski"
- [7] Drucker, P. Managing Challenges in the 21st Century. S., Classic and Style, 2008.
- [8] Prof. Stefan Mitchev, PhD - Postmodern Security Model - <http://balkananalytica.info/wp-content/uploads/2015/03/pub-michev-2015-postmoderna-sigournost.pdf>.

Citation: Stoyko Stoykov, Vanya Dimitrova, "Scientific Knowledge in the Field of Security - Problems and Solutions", *International Journal of Emerging Engineering Research and Technology*, 7(4), 2019, pp.1-3

Copyright: © 2019 Vanya Dimitrova. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.