

Ministry of Education and Science of Ukraine
Poltava State Agrarian Academy

**SECURITY MANAGEMENT OF THE
XXI CENTURY: NATIONAL AND
GEOPOLITICAL ASPECTS. ISSUE 2**

Collective monograph

In edition I. Markina, Doctor of Economic Sciences, Professor



Nemoros s.r.o.

Prague, 2020

Editorial Board:

Roman Rossi, Hon. Dr., President of the Eastern European Center of the Fundamental Researchers (EECFR), Prague, Czech Republic;

Valentyna Aranchii, Ph.D. in Economics, Professor, Rector of Poltava State Agrarian Academy, Poltava, Ukraine;

Yuri Safonov, Doctor of Sciences (Economics), Professor, National Economic University named after Vadym Hetman, Kyiv, Ukraine;

Viktoriia Riashchenko, Expert of Latvian Council of Science, ISMA University of Applied Science, Riga, Latvia;

Oksana Zhylynska, Doctor of Sciences (Economics), Professor, Vice-rector of scientific work, Taras Shevchenko National University of Kyiv, Kyiv, Ukraine;

Dmytro Diachkov, Ph.D. in Economics, Associate Professor, Poltava State Agrarian Academy, Poltava, Ukraine;

Diana Kucherenko, Ph.D. in Economics, Associate Professor, member of Academic Council of the Eastern European Center of the Fundamental Researchers, Director of Science and Research Institute of Social and Economic Development Kyiv, Ukraine;

Olena Bielousova, Ph.D. in Public Administration, Associate Professor, Kharkiv Petro Vasylenko National Technical University of Agriculture, Kharkiv, Ukraine.

Chief Editor:

Iryna Markina, Doctor of Sciences (Economics), Professor, Honored Worker of Science and Technology of Ukraine, Poltava State Agrarian Academy, Poltava, Ukraine.

Reviewers:

Anatoliy Balanda, Doctor of Sciences (Economics), Professor, Professor of the special department of the Educational and Scientific Institute of Retraining and Professional Development of the Personnel of the Security Service of Ukraine of the National Academy of Security Service of Ukraine, Kyiv, Ukraine;

Aivar Stankevich, Dr. oec., Daugavpils University, Institute of Humanities and Social Sciences, Daugavpils, Latvia;

Hanna Kozachenko, Doctor of Sciences (Economics), Professor, National Academy of Internal Affairs, Kyiv, Ukraine.

*Recommended for publication by Academic Council of
Poltava State Agrarian Academy
(Protocol No. 13 dated 5 February 2020)*

*Recommended for publication by Academic Council of
the Institute of education content modernization of
the Ministry of Education and Science of Ukraine
(Protocol No. 1 dated January 29, 2020)*

*Recommended for publication by Scientific Institution of
the Information Systems Management University
(Protocol No. 1-20 dated February 04, 2020)*

The monograph is prepared in the framework of research topics: «Management of national security in the context of globalization challenges: macro, micro, regional and sectoral levels» (state registration number 0118U005209, Poltava State Agrarian Academy, Ukraine), «Macroeconomic planning and management of the higher education system of Ukraine: philosophy and methodology» (state registration number 0117U002531, Institute of education content modernization of the Ministry of Education and Science of Ukraine, Ukraine), «Infocommunication aspects of economic security» (Protocol 1-20 of February 04, 2020, Information Systems Management University, Latvia).

Any partial or entire reproduction, of this document should cite the source. Materials are printed in original languages. The authors are responsible for the statement, the content and reliability of the materials.

© Copyright by
Eastern European Center of the
Fundamental Researchers,
Nemoros s.r.o.,
Rubna 716/24, 110 00, Prague 1

ISBN 978-611-01-1814-9

Nemoros s.r.o.,
Rubna 716/24, 110 00, Prague 1
Czech Republic, 2020

PREFACE

The issues of security management in the conditions of the modern environment instability are of top-priority and stipulate continuous scientific research on the topics of the global and national economic, technological, food, energy security, innovation aspects of forming social, educational, and information security, management of economic security in conditions of integration processes and other.

In the early 21st century, the world faces with cardinal transformations accompanied by changes in geopolitical configurations, integration processes and other changes that affect the state of national and geopolitical security. The events of the last decade have revealed an exacerbation of the problems of global security and the ambiguous impact of the processes of globalization on the development of different countries. Under the circumstances, the rivalry between the leading countries for redistribution of spheres of influence is stirring up and the threat of the use of force methods in sorting out differences between them is increasing. The global escalation of terrorism has become real, the flow of illegal migration and the probability of the emergence of new nuclear states are steadily increasing, and international organized crime is becoming a threat. In addition, in many countries there is an exacerbation of socio-political and socio-economic problems that are transforming into armed conflicts, the escalation of which is a real threat to international peace and stability. These and other factors have led to the fact that the potential of threats to global and national security has reached a level where, without developing a system state policy to protect national interests and appropriate mechanisms of its implementation, there may be a question of the existence of individual countries as sovereign states.

The threat of danger is an immanent, integral component of the process of civilization advancement, which has its stages, parameters and specific nature. Obviously, the problem of security in general, and national one in particular, should be objectively considered in terms of its role participation in the development process, that is, to set it up as both destructive and constructive functions (as regards the latter, it is necessary to emphasize the undeniable fact that the phenomenon of safety is based on counteraction to the phenomena of danger, the necessity of protection from which exactly stimulates the process of accelerating the search for effective mechanisms of counteraction).

The formation of new integration economic relations in Ukraine and the intensification of competition objectively force managers of all levels to change radically the spectrum of views on the processes of formation and implementation of the security management system in unstable external environment that is hard to predict. Today, the main task is to adapt not to changes in market conditions of operation, but to the speed of these changes. In this regard, there is a need to develop effective security management mechanisms that are capable of responding adequately and in due time to changes both in the internal and external environment.

Therefore, this problem is being paid more attention in theoretical research works of scientists and practical activity of business entities.

Taking into account the fact that the traditional means of national and geopolitical security as a mechanism in its various models, forms, systems have reached their limits, since they do not contribute to solving the problems of globalization of the civilization development, there is an objective need to form a paradigm of security management in the 21st century, which aims to confront destruction processes; to harmonize activities of socio-economic systems: society, organization, the state, the world. The joint monograph «Security management of the XXI century: national and geopolitical aspects. Issue 2» is devoted to these and other problems. The progress in the development of the theory of security management on the basis of the analysis of theoretical and methodological works of scientists and the experience of skilled workers presented in the joint monograph creates opportunities for the practical use of the accumulated experience, and their implementation should become the basis for choosing the focus for further research aimed at improving the security management system at the national and international levels. In the joint monograph, considerable attention is paid to solving practical problems connected with the formation of the organizational and legal mechanism of organization of the security system in terms of globalization by developing methods, principles, levers and tools of management taking into account modern scientific approaches.

In the monograph, the research results and scientific viewpoints of the authors of different countries are presented in connection with the following aspects of security management: national security, food, environmental and biological security, economic and financial security, social security, personnel and education security, technological and energy security, information and cyber security, geopolitical security.

The authors have performed a very wide range of tasks – from the formation of conceptual principles of security management at the micro, macro and world levels to the applied aspects of management of individual components of national security.

The monograph «Security management of the XXI century: national and geopolitical aspects. Issue 2» consists of four parts, each of which is a logical consideration of the common problem.

The structure of the monograph, namely the presence of particular parts, helps to focus on the conceptual issues of the formation and development of national, economic, financial, social, food, environmental, biological, personnel, educational, technological, energy, information, geopolitical security, and problems of the maintenance of the practical process of application of the developed cases.

The joint monograph is prepared in the context of three research topics: «Management of national security in the context of globalization challenges: macro, micro, regional and sectoral levels» (State registration number 0118U005209); «Macroeconomic planning and management of the higher education system of Ukraine: philosophy and methodology» (State registration number 117U002531); «Infocommunication aspects of economic security» (Protocol 1-20 of February 04,

2020, ISMA, Latvia), which emphasizes not only scientific but also practical focus.

The results of the research works presented in the joint monograph have a research and practice value.

The advantage of the joint monograph is the system and logic of the structure, the simplicity and accessibility of the material presentation, the presence of examples and illustrations.

We believe that the monograph will become one more step towards a scientific solution of the problems concerning the formation of an effective system of security management under trying circumstances of globalization.

Publication of the monograph «Security Management of the XXI century: National and Geopolitical Aspects» is scheduled to be annual. Currently, Issue 2 is offered to our readers.

With best regards,

Iryna Markina,

Honored Worker of Science and Technology of Ukraine,

Doctor of Economic Sciences, Professor,

Poltava State Agrarian Academy,

Ukraine

PART 3. THE MECHANISMS OF ENSURING ECOLOGICAL, FOOD, TECHNOLOGICAL AND ENERGY SECURITY IN THE DYNAMIC ENVIRONMENT

Taraniuk L., Qiu Hongzhou, Taraniuk K. Theoretical provisions of enterprise logistics as an element of the system of food safety.	240
Cseh B. The analysis of the possible effects of the fourth industrial revolution in terms of the hungarian budget expenses.	246
Cherep O., Seysebaeva N., Gamova O., Kanabekova M. Interdependence of functions and methods of innovative management in the process of management by activity by industrial enterprise.	254
Panchenko V. A dynamic model of making decisions in the entrepreneurship security system	263
Zos-Kior M., Markov R., Sevryukov V. Land resources management in the context of strengthening food security of Ukraine	268
Lutay L., Baranets I. Management of transforming social projects as the basis of social security	274
Ovcharenko I., Tyshchenko V., Paschenko P. Economic security management of educational institutions based on energy efficiency	281
Svatiuk O., Zerebylo I., Rak N., Shehynska N. Innovative management and economic security of the enterprise's project activities	288
Fedirets O. Management of the development of agricultural resources use	297
Potapiuk I., Mazilenko S. Food security system: conceptual fundamentals	303
Kobchenko M. Designing of land use of a competitive agricultural enterprise.	308
Aksyuk Y. Management peculiarities of agro-processing enterprises marketing system in the conditions of globalization	321
Stetsenko M. Environmental management system of modern enterprise	331
Mykhatilo V. New marketing directions	336
Vovk M., Voronina V., Mamedova Z. Implementation of energy-saving technologies as an integral part of technological restructuring of production	342

PART 4. INNOVATION ASPECTS OF FORMING SOCIAL, EDUCATIONAL AND INFORMATION SECURITY

Safonov Y., Borshch V. Personnel and intellectual security at the modern enterprise as a component of its' economic security.	348
Szilárd H., Petronella M. New trends of the public management - the remunicipalisation.	353
Zhyvko Z., Ruda O., Kucharska L. Information security and economic crime: problems and solutions	362

PART 4. INNOVATION ASPECTS OF FORMING SOCIAL, EDUCATIONAL AND INFORMATION SECURITY

PERSONNEL AND INTELLECTUAL SECURITY AT THE MODERN ENTERPRISE AS A COMPONENT OF ITS' ECONOMIC SECURITY

Yurii Safonov,

*Doctor of Sciences (Economics), Professor,
Kyiv National Economic University named after Vadym Hetman,
Kyiv, Ukraine,*

Viktorii Borshch,

*Ph.D. in Economics, Associate Professor,
Odessa National I. I. Mechnikov University, Odessa, Ukraine*

Security for the enterprise is the key to its productive activity and prosperity. This state contributes to the fact that all employees direct their efforts to achieve new results. However, any business can be exposed to various dangers, such as: leakage of confidential information; financial loss or bankruptcy; risk of losing valuable employees; risk of misappropriation of cash or valuable objects; danger to the health and life of personnel.

So we are seeing there's a need for ensuring personnel security at the enterprise as a part of the whole economic security, main aim of which is provision of sustainable and efficient functioning of the enterprise at the present time and ensuring a high potential for development and growth of the enterprise in the future.

Personnel security is one of the components of economic security (along with others, such as financial, information, technical and technological, legal, environmental (fig. 1). It is sometimes called the «personnel and intellectual» component of economic security.

Personnel security is the process of ensuring the overall economic security of the organization by preventing the risks of threats that are associated with poor work or low intellectual potential of employees, and labor relations in general.

Threats related to personnel management, could be divided on two groups: internal and external. External threats are actions, phenomena or processes that do not depend on the will and consciousness of the employees of the enterprise and entail damage. The main external threats are the following: competitors have better work conditions or/and motivation system; deliberate brain drain of personnel; external pressure on employees; inflation and so on.

Internal threats are actions (intentional or reckless) of employees of the enterprise that also entail damage. So the main internal threats are: inadequacy of staff qualifications; poor training of staff; weak personnel management system;

poor provision of on-the-job training; inefficient motivation system; mistakes in resource planning; withdrawal of qualified personnel; lack of or weak corporate policy and so on.

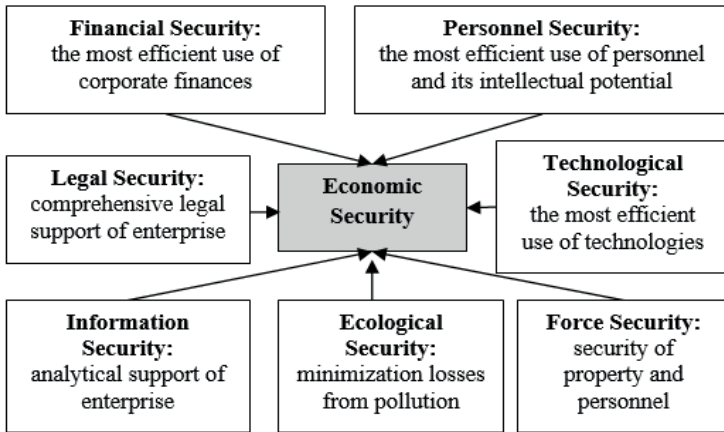


Fig. 1. Functional components of the enterprise’s economic security

Undoubtedly, all these negative environmental impacts affect the processes within the enterprise, in general, its safety in terms of personnel.

In our view, personnel security dominates in relation to other elements of the enterprise’s security system, as it is connected with personnel, which is primary component in any enterprise.

The key structural unit, which is functionally responsible for the personnel security at the enterprise, is hr-department. The complex of its main functional responsibilities, such as qualified recruitment, rational use of human resources, and development of the efficient techniques to encourage and stimulate personnel, – is the main tool for ensuring vocational protection. Personnel policy is a core for ensuring personnel security. As we know, the activity of the hr-department could be broken down into the several stages and components, the main of which are: personnel search – recruitment – personnel adaptation – professional development – attestation – remuneration – motivation and stimulation – termination, but this list of elements is not final, we have to remember about strategic planning (personnel policy and strategy) and external component of the personnel management. At all these stages the problem of the security exists: any act of hr-manager at any stage is a trigger of strengthening / weakening of the enterprise’s personnel security. World statistics provides ample evidence of that: about 80 % of damage to physical property of companies is caused by its personnel. It’s just 20 % of hacking attempt to the net for obtaining unauthorized access to the computer-based information is external one. Other 80 % of accidents are provoked due to the enterprises’ personnel. In

average, these attempts cause 6-9 % of losses. We have provided just the statistics on intentional damage, but what's about the damage to the enterprise related to illiterate use of resources, incompetence, omission, lack of loyalty of enterprise's personnel? This could cost billions of damage for the enterprise. Again let us emphasize that hr-department is the core structural unit, ensuring personnel security, which allows to reduce losses of the enterprise, related to its personnel, by 60 %.

The main lines of actions of hr-management, directed of ensuring personnel security, by means of special techniques:

1. Recruitment. Here is a whole set of security measures in hiring and forecasting reliability. The main processes of hr-manager, which influence the personnel security, are personnel search, selection process, and documentation, legal enforcement of recruitment, probationary period and adaptation.

Thus, the main principles of ensuring personnel security during this hr-management stage are:

- the desire to protect the enterprise from the penetration of people related to criminal structures;
- the desire to set up barrier in front of people prone to theft. Moreover, the higher the position occupied by such a person, the more economic damage he / she can cause to the enterprise, in which he / she works;
- screening for addiction to alcohol and drugs;
- ensuring information security of the enterprise. This includes not only the protection of production and trade secrets, but also the protection of databases, marketing research results, plans related to contracts with other companies, and other information important for maintaining its competitiveness;
- employees' compliance with organizational culture.

This aspect of security has very often been underestimated in recruitment process, although it is clear that one person who adheres to destructive attitudes can do much damage to the enterprise, which is expressed in worsening moral and psychological climate, squabbles, conflicts, and worsening labor and executive discipline.

There are a number of approaches that allow solving security problems in recruitment. HR-department has to check information about applicant by communicating with people, which know him/she, and also by appealing to the previous employees. HR-department carefully examines documents, provided by the applicant.

Particularly important for enterprise's security is hr-manager. He / she is supposed to be a good psychologist and has to see through people. His / her insight and understanding of human psychology help to discover problematic applicants, i.e. people, which could create some problems, leading to disrupt security. These problems can refer economic, information or personnel spheres.

When seeking employment, candidate in turn wants to find out the aspects of his / her security: financial security (how much he will receive; in which way: cash

payouts or bank account); reliability of his / her workplace (how long the firm exists; whether business is legal and so on); organizational culture (whether there is the nice psychological climate); psychological and legal support (the desire not to have psychological stress related to the performance of his / her work); social security (what social package the firm offers its employees and so on).

During the probationary period the proclivities and abilities hazardous to the enterprise could be examined by means: (1) «extreme» testing of staff morale and performance through stress situations, which is related to the modeling of non-standard situations in a collective communication environment to test the adequacy and consistency of behaviour in conflicts, involvement in intrigue, etc., and on the other hand – with intentional creation. In such cases, the ability to think quickly and productively and make correct and operational decisions is identified; (2) method of provocations.

2. Loyalty. Here a set of measures is used to establish positive attitudes of employees towards employers. This component of security threat prevention has traditionally received little investment. However, in saving on this, the enterprise will have to spend even more resources on the activities of the next, third block.

3. Control. Here a set of measures established for personnel, including administration, regulations, restrictions, regimes, process processes, assessment, control and other operations, security procedures is used. This complex is directly targeted at elimination of potential damage and is usually carried out by the security or other departments, but to a lesser extent by hr-department.

One of the key points of cooperation between the hr-department and the security department is the management of disciplinary relations. Managing the discipline is a struggle against disorganization, passivity, dishonesty, and irresponsibility. In case of a conflict, security department's assistance is also required.

4. Information management. For the safety of personnel and the enterprise as a whole, it is necessary to protect information and prevent its leakage. Only an integrated approach to solving this problem is able to provide the necessary level of security for any enterprise - both state and commercial.

So, to begin, we must define the causes of the failure of information systems, which, as a rule, are the mistakes of users and system administrators. Inadvertent user errors when entering, modifying and processing information annually bring big losses to the organization. Theft of physical information carriers, paper documents, as well as information leakage through personnel can be attributed to the second place. In third place in terms of damage to information and its processing systems are all kinds of natural disasters, fires, heating system accidents and, which is especially important for our country, power failures. And one of the latest threats is the threat of information theft through public networks and the Internet.

If the employer has evidence of disclosure by the employee of information constituting a trade secret, then he has the right not only to apply disciplinary measures to the employee, but also to demand compensation from him for losses

caused by his actions.

Consequently, in order to create a reliable personal security system and its further development in the modern information world, the enterprise should accelerate the certification of information security management based on the international ISO 27001 standard. In recent years, management of security systems in the enterprise has been widespread, including those related to personnel, based on the methods of data mining

Thus, personnel security, as an element of the economic security of the company, is aimed at such work with personnel, at establishing such labor and ethical relations that could be defined as «break-even». All this activity is not a separate direction in the functional of the personnel manager, but only organically fits into it. And here, practically no additional resources are attracted, provided that the company has all the stages of organization and personnel management.

There is no doubt that among the tools for providing personal security at the enterprise, issues of increasing the degree of technical protection of strategically important corporate information are actualized, but the primacy, according to the author's deep conviction, belongs to the non-technical side. Therefore, for domestic enterprises, an important step in the implementation of an integrated and holistic system of personal security is the improvement of the practice of psychological diagnosis and monitoring of employees' actions, in particular, the improvement of systems for collecting information on employee behavioural indicators in the corporate environment and beyond. The introduction of modern modeling techniques will contribute to the strengthening of systematicity in the practice of providing personal security under the influence of external and internal threats.

In the conditions of the formation of a new economy, when high-level information and communication technologies are developing rapidly, among the managerial aspects the issues of managing the psychological and motivational potential of employees are updated. Among moral values, a special place occupies trust, as a complex socially significant phenomenon of the reality of a modern, volatile and contradictory world, which has not yet received the proper scientific theoretical and applied rationale and is among the scientific interests of the author of this article. Among the issues of further scientific research by the author is the evaluation of the effectiveness of the application of various systems, methods and tools for personal security management at the enterprise

References:

1. Matros, T. 2014. Simulation of economic security in unsteady conditions of enterprises. [ONLINE] Available at: <http://masters.donntu.org/2014/iem/matros/diss/indexe.htm> [Accessed 31 January 2020].
2. Chumarin, I. G. What is the personnel security of the company? [ONLINE] Available at: <https://psycho.ru/library/1027> [Accessed 31 January 2020].

3. Intellectual and personnel security of organization: How to protect the organization from the damage. [ONLINE] Available at: https://www.hr-director.ru/article/66809-qqq-17-m8-kadrovaya-bezopasnost-obespechenie-sozdanie#_=_ [Accessed 31 January 2020].

4. Maslova, V. M. Personnel management. [ONLINE] Available at: https://studme.org/1256120426153/menedzhment/upravlenie_personalom [Accessed 31 January 2020].

5. Zatonatskiy, D. (2019). Innovation Methods and Models of Personnel Security Management: Opportunities and Imperatives of Use at Ukrainian Enterprises. *Marketing and Management of Innovations*, 1, 294-301. <http://doi.org/10.21272/mmi.2019.1-24>

6. Al-Dhahri, S., Al-Sarti, M. & Abdul, A. (2017). Information Security Management System. *International Journal of Computer Applications*, 158(7), 29-33.

7. Chumarin, I. (2005). Work with staff in the context of the overall security of the company. *HR management*, 1, 34-40.

8. Kyrychenko, O. A., Sidak, V. S. (2008). Problems of management of economic safety of subjects of management: monograph. Kiev: Universytet «Krok».

9. Puchkova, S. I. (2013). Management personnel security enterprise through modern HR technology. *Scientific Bulletin of the Odessa National Economic University*, 26 (205), 43-54.

10. Zhyvko, Z. B. (2013). Conceptual bases of personnel security management of the enterprise. *Collection of scientific works of Taurian state agrotechnological university (economic sciences)*, 2(1), 103-111.

NEW TRENDS OF THE PUBLIC MANAGEMENT - THE REMUNICIPALISATION

Szilárd Hegedűs, Ph.D.,

Researcher, University Lecturer,

Budapest Business School and National University of Public Service, Hungary,

Petronella Molnár,

Researcher, Ph.D. student,

National University of Public Service and Szent István University,

Budapest, Hungary

The approach of organizing public services varies from country to county, and is affected by the development of economics, law, management. However, the desired system is the same, as they all serve the highest satisfaction of citizens, taxpayers. So, on the one hand, our research includes a theoretical history presentation from the 1970s to the present. During this, we present and evaluate triggering processes from the perspective of NPM, and we also cover the most significant events of the present.