

## **KNOWLEDGE MANAGEMENT IN THE DEVELOPMENT OF THE MINISTRY OF NATIONAL DEFENCE EMPLOYEES**

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### **Abstract**

The aim of this paper is to present the role of knowledge management in the process of professional development of the Ministry of National Defence personnel with regard to contemporary socioeconomic changes. The basic research problem concerns the use of the knowledge management concept in the management of the process of professional development of the Ministry of National Defence employees. The structure of the article covers two basic exploratory issues. The first one refers to general theoretical tenets of knowledge management in modern armed forces. The second one concerns the functioning of armed forces in a knowledge economy. Aside from theory, the paper also looks at the practical aspects of knowledge management in armed forces. Results from the analysis of the literature and of non-standardised indirect observation were used during the research process. Face-to-face, free-form interviews with selected knowledge management specialists were also employed. The process of drawing conclusions was aided by the opinions of selected officers, students of postgraduate courses conducted at the War Studies University.

**Key words:** armed forces, knowledge management, staff management, learning organisation, professional development

### **Introduction**

The need for creation and development of knowledge economy infrastructure and the transition of an organisation into an intelligent unit model should be frequently analysed by all countries which strive to attain the development of their domestic enterprises, significant economic growth and the effectiveness of the national defence system and the armed forces.

The increasing number of new national, EU-wide and international programmes and regulations stress the importance of making a conscious effort related to the examined matter. Of note is the 'Europe 2020' strategy which puts forward three

priorities on which the development of the European social market economy should be based, namely: smart growth (based on knowledge and innovations), sustainable growth (environment friendly) and inclusive growth (fostering high employment and economic, social and territorial cohesion). The situation described here influences the process of professional training for the Ministry of National Defence employees.

The implementation of the 'Europe 2020' strategy should bring about a low-emission economy based on knowledge, promoting environmental friendly technologies, using its resources economically, creating new 'green' workplaces, while acting to maintain social cohesion. Moreover, the 'Long-Term National Development Strategy Poland 2030, Third wave of modernity' emphasises that Poland must recognise changes taking place globally and be prepared for different development scenarios, primarily in the areas of technology, access to knowledge, changes in the traditional social roles of men and women, and define its role in a manner that will foster the growth, not hindering the creative activities of its citizens<sup>1</sup>.

Given the changes currently taking place in the international security system, it appears that one of the key tasks of Poland's defence system is to ensure the internal and external security of the country. This is emphasised by numerous documents, including the Strategy of Development of the National Security System of the Republic of Poland 2022, Main Directions of Development of the Polish Armed Forces and of its Preparations for the Defence of the Country from 2017 – 2026 and the Programme of the Development of the Republic of Poland Armed Forces 2013-2022. 'The increasing frequency of attacks of a hybrid nature make investing in deterrence and defence capabilities, including improving the resilience and ability to respond quickly and effectively to cyberattacks, indispensable. (...) Poland achieving a strong international position in the area of cybersecurity will not be possible without having the necessary domestic expertise. Staff resources supported by adequate funding will be the basis for building the image of Poland as a competent player in the international arena.'<sup>2</sup> This stresses the importance of taking action regarding the improvement of military personnel expertise, obtaining specific and targeted information, high speed transmission of knowledge and sharing the knowledge with bodies concerned with strengthening security and the international standing of the country. It is, therefore, necessary to adopt systemic measures which will allow the exchange of information between stakeholders and the sharing of

<sup>1</sup> More information available in: *Program Operacyjny Polska Cyfrowa na lata 2014-2020, Program Operacyjny Wiedza Edukacja Rozwój 2014-2020; Długookresowa Strategia Rozwoju Kraju, Polska 2030, Trzecia fala nowoczesności*, Warsaw.

<sup>2</sup> *Strategia Cyberbezpieczeństwa Rzeczypospolitej Polskiej na lata 2017-2022*, p. 24 and further; translated fragment taken from: *National Framework of Cybersecurity Policy of the Republic of Poland for 2017-2022*, pp. 22-23; [https://www.enisa.europa.eu/topics/national-cyber-security-strategies/ncss-map/Cybersecuritystrategy\\_PL.pdf](https://www.enisa.europa.eu/topics/national-cyber-security-strategies/ncss-map/Cybersecuritystrategy_PL.pdf), access: February 2019.

knowledge concerning threats and incidents, which depends on the implementation of knowledge management approach.

The role of knowledge and its management in building an effective state with a knowledge economy was emphasised in the first detailed objective of the Responsible Development Strategy 2020. It states that specialised ‘personnel broadly using knowledge, employing modern methods of acquiring information and data processing in their work is a prerequisite for the envisaged ‘civilisational leap’, and this ‘civilisational leap’ is based on strong and dynamic growth of knowledge economy, therefore also being based on the demand for creative, highly-skilled personnel.<sup>3</sup> This directs the efforts of the Ministry of National Defence towards activities aimed at training of a new quality of not only military, but also civilian personnel.

The aim of this paper is, thus, to highlight the role of knowledge management in the process of professional training for the Ministry of National Defence employees with regard to contemporary socioeconomic changes which determine the effectiveness of a knowledge economy.

So, in the context of the described problem situation, the basic research problem boils down to a question – how can the approach of knowledge management in the process of professional training for the Ministry of National Defence employees be made use of? A solution for the problem presented in this manner is not possible without solving specific problems:

1. What are the tenets of knowledge management in modern armed forces?
2. How do armed forces fare in a knowledge economy?

The results from the literature analysis and from non-standardised indirect observation were used during the research process. Face-to-face, free-form interviews with selected knowledge management specialists were also employed. The process of drawing conclusions was aided by the opinions of selected officers, students of postgraduate courses conducted at the War Studies University.

### **Knowledge management in modern armed forces – theoretical assumptions**

Knowledge management is considered as a complex approach which should pertain to all areas of areas of an organisation’s activities, in particular the operation of armed forces. The results of source literature analysis provide the basis for the statement that there are many concepts and definitions of knowledge management. Some of the most prominent scholars in this field, W. R. Bukowitz and R. L. Williams, believe that knowledge management ‘is a process which allows an organisation to generate

<sup>3</sup> *Strategia na rzecz Odpowiedzialnego Rozwoju do roku 2020 (z perspektywą do 2030 r.)*, Warsaw 2017, p. 83.

values from intellectual assets or other knowledge-based resources.<sup>4</sup> According to T.A. Stewart, knowledge management can be described as possession of knowledge – what we know about and are able to identify and organise in a manner that leads to making profits.<sup>5</sup> Effective knowledge management might also be regarded as the need to change strategy, the structure of an organisation, operating procedures and organisational culture, while the elements of the management system should be integrated in a way that improves transmission of knowledge.<sup>6</sup> To recap on these findings, it can be concluded that effective knowledge management in the armed forces has become a necessity and is determined by the need to adapt the army to the requirements of a modern state formed by an information society.

When a certain stance on the term knowledge is taken, it affects how one understands knowledge management in armed forces. If knowledge is to be understood as a state of mind (of commanders, staff officers or the Ministry of National Defence employees), knowledge management should be focused on creating situations which allow access to potentially useful information and facilitate acquisition of the information. If knowledge is to be understood as an object, knowledge management should be focused on creating and managing knowledge resources. Therefore, modern armed forces utilise the already collected knowledge resources and create new ones that are useful in the face of forthcoming challenges. If we are to think of knowledge as a process, however, then knowledge management should be focused on the transmission of knowledge and the processes of creating it, sharing it and making it available. In this approach, practical application of knowledge management is constituted by continuous professional development and training of the Ministry of National Defence employees. If knowledge is to be understood as ability, knowledge management should be focused on establishing and developing key skills and creating intellectual capital. Knowledge management may also be understood as the process of identifying, acquiring and accumulating collective knowledge within the organisation to improve the organisation's competitiveness.<sup>7</sup> The conditions described above form the basis of the conclusion that modern armed forces must be flexible in how they react to changes and utilise knowledge management-based solutions in their on-going official activities. When employing knowledge management, one must always make its tenets clear and comprehensible to all members of an organisation. It is important to present the

4 W.R. Bukowitz, R.L. Williams, *The Knowledge Management Freedbook*. Financial Times, Prentice Hall, London 2000, p. 2.

5 T.A. Stewart, *The Wealth of Knowledge: Intellectual Capital and the Twenty-first Century Organization*, Crown Publishing Group, USA, 2007, p. 112.

6 M. Morawski, Zarządzanie wiedzą – strategie, systemy, metody, In: *Zarządzanie wiedzą i informacją. Teoria i praktyka*. M. Morawski (red.), Prace naukowe Wałbrzyskiej Wyższej Szkoły Zarządzania i przedsiębiorczości, WWSZiP: Wałbrzych 2006, p. 39.

7 M. Wiśniewska, P. Głodek, *Scouting wiedzy w ramach uczelni wyższej*, w: *Budowa potencjału uczelni wyższej do współpracy z przedsiębiorstwami. Rola scoutingu wiedzy*, P. Głodek, M. Wiśniewska (red.), Wydawnictwo Uniwersytetu Łódzkiego, Łódź, 2015, p. 12.

goals as aims of knowledge management. It is advisable to simultaneously determine a knowledge management strategy. Knowledge strategy is an enterprise management strategy expanded with details concerning requirements of knowledge resources that an enterprise should dispose of in order to achieve its objectives. The Knowledge Management Strategy consists of formulas that combine the aims of the Knowledge Management Strategy, principles regulating the System as well as the relations and means that form the System. To put it differently, these formulas concern the manner in which an enterprise intends to acquire knowledge which it will later use to implement its competitive strategy.<sup>8</sup>

Presenting the goals of knowledge management as clear and precise aims which specify knowledge management strategy, and maintaining continuous knowledge conversion in an organisation, leads to an awareness of the significance of knowledge management; therefore, it is important to take further action to include it in an organisation's daily operations. It should be emphasised that in order for knowledge management to produce desired outcomes, it has to be implemented in a systematic manner as a conscious and planned process, while knowledge should be treated as the key resource of an organisation and continuously developed, enriched, updated and secured. For this reason, the armed forces create a professional development plan for officers and non-commissioned officers every year as well as for civilian employees of the Ministry of National Defence. Its purpose is to coordinate efforts in knowledge management and to prepare the Ministry's personnel for challenges stemming from changes in the military security environment.

An effective modern state and its public administration implementing IT-based solutions (e-administration) are the prerequisites of a well-functioning knowledge economy in Poland. The forces responsible for the defence and security of the country and its citizens, i.e. uniformed services, especially the armed forces, should be the ones to react to socioeconomic changes in a specific and rapid manner. Only the most qualified employees of the Ministry of National Defence are capable of fulfilling planned operational-strategic objectives and establish the armed forces as an intelligent organisation, creating knowledge networks and improving transfer of knowledge. The level of the knowledge itself and information resources should constantly be updated and developed. This is particularly the case for the Ministry of National Defence representatives. There, the national security procedures, reactions and requirements need to be constantly updated, competences in new areas concerning potential threats expanded, and effective and comprehensive programmes for the training and development of all staff created.

In order for institutions to develop and become more innovative, operate effectively and improve the state's operations, they should base their decisions on knowledge acquired in a reliable manner. This is why knowledge databases and repositories of case studies, expertise and good practice are so crucial for public,

<sup>8</sup> B. Miłucha, *Organizacje oparte na wiedzy*, Wydawnictwo AE w Krakowie, Kraków 2006.

government and non-government institutions. Time should not be wasted on creating once-applied solutions, rediscovering knowledge resources anew or searching for solutions for ideas that have already been created. Instead, it is necessary to move forward, improving what already exists and seek ever more precise solutions. This reason highlights the great value of IT solutions and the willingness of the skilled staff to share the knowledge with teams of experts, which provides access to knowledge for all entities that might find this knowledge useful.

### **Activity of armed forces in a knowledge economy**

Knowledge management in military structures is intended to enable managers and leaders to process and utilise information to fulfil their own goals. IKM (*Information Knowledge Management*)<sup>9</sup> is based on one core principle: information is an asset of the organisation and it must be standardised, secured and protected (particularly in the military environment).<sup>10</sup> Resources management of knowledge and of related concepts is a basic and necessary component of the mission. It is done chiefly with the use of such computer based tools to facilitate creating, storing and sharing documents in a cooperative environment, as well as: principles, guidelines, assessments, reports, briefing protocols etc. IT tools ensure instant access to a stream of information in real time and improve the quality and ease of making phone calls from virtually anywhere in the world.<sup>11</sup>

Along with IT infrastructure and processes, the principles of knowledge management set forth in NATO documents ensure the optimal use of the most valuable resource, intellectual capital. Training of the leaders and specialists of a NATO member and those from partner states contributes to the development of doctrines, identification of gained expertise, improvement of interoperability and capabilities, and testing and validation of various concepts through experimentation. Their expertise and skills are beneficial to the Alliance because they aid NATO transformation, while avoiding the duplication of the NATO Command Structure assets, resources and capabilities. By empowering security and defence, IKM is one of the biggest facilitators in NATO transformation. Information exchange is seen as a basic principle and factor in building trust and ensuring defence and security.<sup>12</sup>

<sup>9</sup> In spite of information being just a component of knowledge. NATO documents prefer using 'Information Knowledge Management' instead of 'knowledge management'. This might be the result of diligence in managing the information itself and also of care for the quality and clarity of knowledge resulting from comprehension and assimilation of the information.

<sup>10</sup> NATO Directive: *Collective Training and Exercise Directive (CT&ED) 075-003, ANNEX U TO BI-SCD 075-003*, <http://www.natolibguides.info/training/documents>.

<sup>11</sup> A. Szczygielska, *Kształtowanie zasobów niematerialnych w SZ RP*, AON, 2016.

<sup>12</sup> A. Russo, *Information Knowledge Management; A Mission Essential Asset ITA AF, JAPCC*; <https://www.japcc.org/information-knowledge-management/>, access: January 2019.

Continuous emphasis on development and training of people associated with armed forces is a permanent activity and, in itself, an ever-present goal.

When it comes to the awareness of the role of activities connected with knowledge management and of the practices of organisational learning in the armed forces, the United States lead the way.

The USA recognised the knowledge management concept as crucial 15 years ago, in 2004. In one of the first published documents, Army Regulation 25-1, Army Knowledge Management and Information Technology (the full text was published in 2005), knowledge management was recognised as a strategy for transforming armed forces into network-centric, knowledge-based forces, constituting another step towards creating the army of the future. In this document, knowledge management in the army is described as a combination of processes and techniques that are employed to dynamically transfer expertise from an experienced soldier to an inexperienced one, all the while ensuring shared understanding. The document also acknowledges the importance of the adaptiveness of the military and the ability to introduce rapid changes and take prompt action coupled with making instant but correct decisions.<sup>13</sup> One of the US doctrines of 2015 describes knowledge management as a process enabling knowledge flow to foster shared understanding, learning and decision-making.<sup>14</sup> *Multinational Capability Development Campaign* (MCDC), which is the continuation of the *Multinational Experimentation* (MNE) cycle launched by the United States Joint Task Forces Command in 2001, is also important when it comes to knowledge management. In its action, the MCDC is focused on achieving ‘non-material’ outcomes through its activity. Apart from regulating the form of doctrines, internal documents and publications and information material, numerous training courses are conducted and materials disseminated to develop military personnel; however, all employees of the US Armed Forces are presumed to know the mission and vision stemming from the implementation of consequent stages of knowledge management. This is because the goal is to establish organisational culture that creates, shapes, applies and spreads knowledge to and among all kinds US Armed Forces. The power of knowledge lies in this observation: one learns and everybody knows.<sup>15</sup>

Of great importance in shaping and disseminating knowledge, thus also in developing and increasing the value of intellectual potential of military personnel, is the Lessons Learned concept, which means more than simply the lessons learned through experience. The lessons should be utilised to implement changes and

<sup>13</sup> A. Szczygielska, *Zarządzanie wiedzą w Siłach Zbrojnych*, W: „VOJENSKÉ REFLEXIE“, Akadémia Ozbrojených Síł generála Milana Rastislava Štefánika, Liptovsky Mikulas, No 1/2016, pp. 100-118.

<sup>14</sup> ADRP Doctrine 6-0, Headquarters Department of the Army Washington, 2012 (as amended, 2014 website: <https://armypubs.us.army.mil/doctrine/index.html>, access : May 2016.

<sup>15</sup> Knowledge Management Strategic Plan U.S. Army Training and Doctrine Command; Version 10.3, HQ TRADOC , TRADOC Knowledge Management Office, Chief Knowledge Officer (CKO), 01 July 2010.

transformations that lead to a general increase in efficiency and improvement in the functioning of the Armed Forces. LL (*Lessons Learned*) has three key success elements presented as three pillars concerning: structure, processes and tools. They are necessary to share and exchange information. The basics, such as the mind-set, mentality or awareness of the mind and leadership constitute the social and cultural climate that is fundamental to effective LL capability, with the aforementioned sharing of information being the main element that ensures the capability works<sup>16</sup>.

It should be noted here that the task of systemic use of scientific and research instruments which also serve as effective tools for the planning and programming of the development of the Polish Armed Forces has been assigned to the Doctrine and Training Centre in Bydgoszcz. The tasks of the Doctrine and Training Centre include, but are not limited to, gathering experience and the conclusions of soldiers and military employees to 'subsequently provide ready-to-use formulas that would help solve the observed problem'. This act follows from the LL concept<sup>17</sup>. As was mentioned before, the undertaken actions must first and foremost lead to continuous improvement and more efficiency in actions as well as to increase the effectiveness of the existing systems, capabilities, structures and procedures. The Doctrine and Training Centre of the Polish Armed Forces in Bydgoszcz is an important element of the process of development of the armed forces personnel. The centre places strong emphasis on, among other things, the 'Concept Development and Experimentation' programme intended to give support to the process of armed forces development. While the programme is conducted as part of international cooperation, it retains national priorities and conditions<sup>18</sup>. The Doctrine and Training Centre in Bydgoszcz also uses the 'Experience Utilisation System' (pol. System Wykorzystywania Doświadczeń, SWD)<sup>19</sup>, which improves the LL system. The SWD serves to support the achievement of greater training outcomes and implementation of better organisational solutions. It is not supposed to control operational outcomes but to minimise the appearance of recurring errors. It also constitutes valuable support for commanders in the process of developing the operational capability of the Polish Armed Forces. The system could be more efficient, if each soldier had access to the Central Database (in accordance with his or her authorisations) and was allowed to

**16** The NATO Lessons Learned Handbook, Third Edition, February 2016, NATO, Joint Analysis and Lessons Learned Centre, 2016, p. 9, Strona internetowa: [http://www.jallc.nato.int/products/docs/Lessons\\_Learned\\_Handbook\\_3rd\\_Edition.pdf](http://www.jallc.nato.int/products/docs/Lessons_Learned_Handbook_3rd_Edition.pdf), access: February, 2019.

**17** Website: <http://www.polska-zbrojna.pl/home/articleshow/5997?t=System-zarzadzania-wiedza>, access: September 2018.

**18** More details can be found on the website of Doctrine and Training Centre, Website: <http://cdis.wp.mil.pl/pl/76.html>, Access: February 2019.

**19** For more details concerning the system see: *Podręcznik systemu wykorzystania doświadczeń proces, metody, narzędzia*; Ministerstwo Obrony Narodowej, Centrum Doktryn i Szkolenia Sił Zbrojnych, Szkol. 885/2014, Bydgoszcz 2014.



share his or her expertise, conclusions and comments there<sup>20</sup>. Importantly, the SWD may also serve to identify new demands and skills that are important for providing an adequate level of security and competitiveness on the world stage<sup>21</sup>. For the system to serve the army and support development of culture oriented on knowledge management, it is necessary to spread information about the importance of this concept among the whole military and civil personnel of the Armed Forces, to ensure the cooperation of these two sectors, to provide cohesive agreement and also ensure effective cooperation between all the elements that create the country's defence potential. Implementation of certain changes in the functioning of the structure of the Armed Forces to render the structure more hypertext-like would also be helpful<sup>22</sup>.

Moreover, the Ministry of National Defence emphasises the importance of implementing the Integrated Multilevel Information System of the Ministry of National Defence (pol. Zintegrowany Wieloszczeblowy System Informacyjny Resortu Obrony Narodowej). There is, however, a perceptible lack of solutions which would allow the effective achievement of full and up-to-date information about intangible resources that could be used by the army. This lack of knowledge makes effective management of armed forces resources impossible, thereby also precluding making rational and optimal decisions on managing of the ministry and command of the armed forces.<sup>23</sup> Gradually and slowly, Poland is adopting the practices of its allies and taking actions regarding its own knowledge management practices. In the matter of the Polish Armed Forces transformation, priority is given to improving the level of their operational capabilities and maintaining forces prepared to respond to current, new and unpredicted threats. Therefore, improving the level of military and general experience of soldiers should be an important element in preparing the Polish Armed Forces to counteract modern threats.<sup>24</sup> In this regard, the ever deeper and more practical implementation of knowledge management principles and building up the intellectual capital of the Polish Armed Forces will be necessary.

The Vision of the Polish Armed Forces 2030 contains plans regarding the level of education of military personnel. It states that the military education system will be oriented towards dealing with the challenges posed by rapid technological advancement and changes in the political, military and operational spheres. Implementation will be aided by the introduction of a flexible training and lifelong learning system based on its own learning centres and civil facilities. Another important element aiding the process will also be the support of the aforementioned

<sup>20</sup> W. Fiderek, *System Wykorzystania Doświadczeń w oddziale*, in: Przegląd wojsk lądowych, no 2/2012, p. 26.

<sup>21</sup> Centrum Doktryn i Szkolenia Sił Zbrojnych, Website: <http://cdis.wp.mil.pl/pl/76.html>.

<sup>22</sup> More in: A. Szczygielska, *Organizacja hipertekstowa jako model organizacji usprawniającej kształtowanie wiedzy w erze wiedzy i niepewności*, In: „MANAGEMENT 2016, Organizacja w obliczu wyzwań współczesnej gospodarki”, Siedlce 2016.

<sup>23</sup> For more details see: *Strategia rozwoju systemu bezpieczeństwa narodowego Rzeczypospolitej Polskiej 2022*, p. 61.

<sup>24</sup> *Strategia rozwoju systemu bezpieczeństwa narodowego Rzeczypospolitej Polskiej 2022*, p. 34.

effective system of collecting conclusions and expertise (*lessons learned*) which result from operations of the armed forces, and implementation of these conclusions in programmes concerning training and learning, carrying out exercises, operational concepts and doctrines. Further on, the document emphasises that the military education system will be tightly integrated with the allies' military education system<sup>25</sup>. It should be noted that initiatives for complex, comprehensive learning on different hierarchic levels and organisational learning are being undertaken with deep awareness of their importance, whereas their scope and range is increasing. Cyclical changes in educational programmes for both officer candidates (in military academies) and officers constitute the practical dimension of the described solutions. Moreover, training programmes during courses for officers improving professional qualifications in the Officers Training Centre in the War Studies University undergo actualisation in terms of topic and subject. The designed system of professional training comprises not only specialist studies and courses but also other types of education intended to prepare participants for taking up new posts in the armed forces.

The document points out that within the areas that influence achieving the objectives of the aforementioned Responsible Development Strategy 2020, 'knowledge and expertise obtained in the course of education is rapidly becoming out-dated. Therefore, Poland needs a model for lifelong learning which would enable continuous updating of knowledge and adapting it to meet the demands of the labour market. ... However, it will not be possible without the use of digital skills. They will provide 21<sup>st</sup> century Poland with competitive advantage.'<sup>26</sup> 'The use of digital technologies is one of the eight key skills important for building a knowledge-based society.'<sup>27</sup> Cybersecurity Strategy and the recognition of cyberspace as another, new battlefield are also worth mentioning. This strategy emphasises that it is necessary to create system solutions which would allow the exchange of information between stakeholders and to share knowledge about threats and incidents, while Poland in order to 'acquire abilities, develop knowledge and exchange the best practices, will give even more attention to bi- and multilateral international cooperation regarding education, training and exercises as well as building awareness.'<sup>28</sup>

<sup>25</sup> *Wizja Sił Zbrojnych RP – 2030*, Ministerstwo Obrony Narodowej, Departament Transformacji, Warszawa 2008, point 87, 88, 89, p. 28 .

<sup>26</sup> *Ibid*, p. 294.

<sup>27</sup> *Strategia Rozwoju Kapitału Społecznego 2020*, p. 42.

<sup>28</sup> *Strategia Cyberbezpieczeństwa Rzeczypospolitej Polskiej na lata 2017 – 2022*, Ministerstwo Cyfryzacji, Warsaw 2017, p. 11, 25.

## Conclusion

The Defence Concept of the Republic of Poland mentions analytical activities which ‘should consist in building expert community in the Ministry of National Defence, as well as integrating the knowledge that already exists in various institutions, both public and private. Apart from classic analytic techniques, specialist IT tools and continuously developed war games and simulations will also be used.’<sup>29</sup> The document also points out that cooperation between spheres of business and science is inadequate or even absent altogether. The document mentions one of the goals by stating that ‘the increase of connections between the sector of science and entrepreneurs is an important task for the upcoming decade.’<sup>30</sup>

As an organisation which, in its key aspect, ensures security of the country and defence level of the state, the armed forces should be at the highest level of development, not only technologically and conceptually but, above all, intellectually. Its military personnel should continuously be improved, while the knowledge of the personnel should constantly be expanded in the face of constantly arising new types of threats, socioeconomic conditions and challenges. If the Polish Armed Forces strive in the long term to become a modern instrument of influence in the future, they should ever more carefully and consistently implement the fundamentals of the concepts of knowledge management and intellectual capital shaping. This will require continuous improvement of the personnel, strengthening the intellectual potential of the armed forces and mobilisation for further development. Of great importance in the process of professional development of the Ministry of National Defence employees is IT support for the undertaken actions. For this reason, programmes enabling the simulation of battle management, operational planning and generation of the scenarios of future events in complex political and military conditions are so important. Another aspect of professional development of the Ministry of National Defence employees is the building of a certain organisational culture that takes into account functioning conditions of a modern country in the international security environment. It seems obvious that since the armed forces do not function as an independent element of a state, it is necessary to align army development with the socioeconomic capabilities and abilities of the country. The last but not the least important aspect of professional development of the Ministry of National Defence employees is civil preparedness in the field of defence. Observations and analyses suggest that it is appropriate for actions in this regard to be taken even at primary school level and developed further in a chosen area at the next levels of education of the young.

The issue of knowledge management in the process of professional development of the Ministry of National Defence employees is a very complex problem and

<sup>29</sup> *Koncepcja Obronna Rzeczypospolitej Polskiej*, website: [http://www.mon.gov.pl/d/pliki/rozne/2017/05/KORP\\_DRUK\\_v03\\_mn2.pdf](http://www.mon.gov.pl/d/pliki/rozne/2017/05/KORP_DRUK_v03_mn2.pdf), access: February 2019.

<sup>30</sup> *Ibid*, p. 70.

requires broad and multi-faceted consideration. Therefore, studies in this thematic area imply the need for permanent monitoring of developments in knowledge management concepts and in security system connected with international situation assessment.

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