

ZRÍNYI MIKLÓS
NATIONAL DEFENCE UNIVERSITY
Doctorate Council

Col. Dipl. Eng. ISTVAN TOTH

*The transformation of the Russian Military Industry since 1992 up to the present,
prospective tendencies of its development by 2020, potential utilization of its results
in the military-technical development of the Hungarian Army*

Author's summary and official reviews

Budapest
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Ret. Lieutenant General Dipl. Eng. Gyula Ungvár
Professor Emeritus, DSc

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1. DEFINITION OF THE SCIENTIFIC PROBLEM

My dissertation was written with the intention to introduce the leading documents of security and defence policy (especially the concept of foreign policy, the strategy of national security and the military doctrine) as well as their development aimed at re-establishing the great power (super-power) status of the Russian Federation and at acknowledging it as a subject impossible to get around in shaping the world policy. These documents had and have exerted very important influence on the structure, the principles of application of the Russian Armed Forces and on the development of the military-technical equipment, used for the realization of their tasks. The question is: How far is the Russian military industry capable of renewing itself and meeting the requirements of the armed forces?

As a result of the change of regime the structure of the Russian military industry has been transformed. Was it able to adapt to the altered military-technical procurement and development requirements and to the trends of the international arms trade? How will the “Security – Economy – Armed Forces” triangle in Russia, its functioning and internal connection, interact? Taking into consideration these aspects, how will the Russian Military–Industrial Complex (MIC) develop by 2020?

In my dissertation it was my objective to verify that global threats and challenges need common international cooperation (multi- and bilateral) between Russia and NATO, also, Russia and certain foreign countries on the political level and in the special field of economy (military industry). The similarities or differences (mistrust, injury of interest) of political and economic interests determine the internal content and depth of this cooperation. What are the characteristic features of the military–technical cooperation between Russia and NATO, Russia and the countries of the Alliance, and what are the possible directions of development in the field of cooperation? There is an extensive discussion going on even nowadays whether after closing the basic phase of reform (2007) in the Hungarian Defence Forces (HDF), there is any further need to keep temporarily the Soviet–Russian–made military equipment, and if yes, for how long. Is it economically reasonable for the HDF to maintain and modernize 15–20 year-old or older military equipment in order to keep and use their defence/combat capabilities? What kind of possibilities, advantages or risks can the necessarily conducted Hungarian–Russian military–technical cooperation provide for the Hungarian party in maintaining, modernizing and developing military–technical equipment to ensure the security of our country and fulfil our commitments within the Alliance?

2. RESEARCH AIMS

In the choice of this theme for my dissertation I have aimed at the following:

- I wished to **survey** and **analyze** in detail the changes of the Russian security policy, based on the development of the approved official documents of security and defence policy after the collapse of the Soviet Union, **focusing** on the related effective documents connected to the requirements towards the Armed Forces of the Russian Federation and their military–technical devices;

- to **examine** the transformation of the Russian Military–Industrial Complex and the impacts of the national security documents on the structure of the Russian military industry, the ownership conditions and production structure of military–technical equipment and armament. Moreover, to **analyze** and **evaluate** characteristic conditions of the current situation in the Russian military industry (production and human resources, scientific-research potential) and based on that, to **outline** its future development. In connection with that, to **present** the export capabilities of the Russian military industry, as a determinative sector of the economy, the perspectives of military–technical cooperation between Russia and NATO, where the import of modern Western military–technical equipment and high technology have more and more importance for Russia;
- knowing the planned application and tasks of HDF and its available spectrum of military–technical equipment to **analyze** which Soviet-Russian-origin devices could be kept – for medium or long term – in HDF’s service. **Exploring** the possibilities and risks of the necessarily continued military–technical cooperation with Russia, which could affect the achievement of HDF’s home-defence and NATO-related tasks. I wish to **examine** how to cooperate in destroying or reselling the equipment withdrawn from service. What cost-effective solutions and alternatives of mutual military–technical research and development could provide within the framework of the Hungarian–Russian military–technical cooperation for the leadership of the MoD.

3. METHODS OF RESEARCH

- Studying the **special literature** related to research aims, especially the documents of Russian Security and Defence Policy, **analyzing** and **systematizing** them, **examining** their impacts on the development of military doctrine and their presence in programs, aimed at the development of the Armed Forces.
- **Exploring reasons** and **conditions** caused by the structural changes in Russian military industry, **examining** the system of relations between security policy and military industry, **presenting** and **predicting** the **tendencies** of its changes for the next decade.
- **Comparing** the military–technical cooperation between Russia and certain NATO-member states, **following up** the security political, economic and scientific aspects of mutually advantageous forms and possibilities of cooperation.
- **Logical analysis** of the HDF’s military–technical development possibilities, **presenting** the role of international cooperation and within that to **outline** the military–technical cooperation (R+D) with the Russian side in the field of cost-effective development, procurement of new military hardware, **risk analysis** of this cooperation.
- In order to fulfil my goals I’ve **participated** in **conferences**, **forums** connected to my theme and **consultations with experts**.

4. THE RESEARCH CARRIED OUT IN DIFFERENT CHAPTERS

The chosen theme of dissertation consists of the Introduction, three Chapters and a Summary.

In the **Introduction** I explain the actuality and importance of the chosen theme, the mutual effect and connection of “Security Policy – Economy – Armed Forces” from the point of view of the functioning(operation) of the Russian state. I wish to outline the role of defence economy, military industry in fulfilling the requirements of the armed forces, also, national defence is presented as an economic activity.

In the **First Chapter**, starting with the official interpretation of the Russian Security Policy and its structure, I present and deduce the historical development of the National Security Strategy, the Concept of Foreign Policy and the Military Doctrine, playing a crucial role in shaping the security policy of the Russian Federation. In a subchapter I analyze and evaluate the content of currently effective security policy papers, their general purpose and detailed tasks concerning the development of the Armed Forces and the Military–Industrial Complex.

In the **Second Chapter** I present and analyze the decisions, made in different presidential cycles, the priorities and results of programs connected to them and aimed at developing the military-industrial basis of Russia inherited from the Soviet Union. An important part of this chapter deals with changes resulted from ownership conditions within the Military–Industrial Complex and their impacts, and with the controlling role of the state. Taking into consideration that the Russian military industry is export-oriented, I examine its position in the international arms trade, the features of its relationship and its cooperation with NATO-countries. I present the features of the Russian arms import and its perspectives, too. On the basis of the conclusions drawn, I reveal the expected tendencies of development within the Russian military industry by 2020.

In the **Third Chapter** I present the Soviet-Russian-made military equipment of the HDF and the possibilities of its further use. In this chapter I give an overview of the Hungarian–Russian military–technical cooperation (past and present) and predict the possible areas of future cooperation, analyzing also the advantages and the risks, that the Hungarian side should or must take into consideration.

In the **Summary** I conclude the new scientific results and recommend further practical availability of the dissertation.

5. CONCLUSIONS

(1) Russia as the legal successor of the Soviet Union had passed wryly through the period of losing its world power position and developing an unipolar world order, dominated by the United States of America. The governing documents (National Security Strategy, Concept of Foreign Policy and Military Doctrine - NSS, CFP and MD) approved in different presidential cycles and the currently effective documents share one common feature: Russia considers the intention to re-establish its former great power status and maintain its nuclear power as a deterrent force, as priorities.

- (2) Assessing and analyzing the geopolitical and geostrategic changes, the Russian state leadership recognized that it was necessary to form a coherent foreign, security and defence policy for a long term, which makes it possible to plan the development of the Armed Forces and the product structure (in terms of quality and quantity) of military–industrial companies. The current documents of Security and Defence Policy (NSS, CFP and MD), furthermore, the valid State Armaments Program (SAP-2020) and the development program of the Russian Military–Industrial Complex (Development Program of the National Defence Industry – 2020) constitute a consistent and logically structured system in harmony with the goals of the Russian leadership. A systemic and complex approach of Russia’s national security by the political elite – in my opinion – gives a better chance and a bigger potential to succeed than the previous ones.
- (3) After the collapse of the Soviet Union the Military–Industrial Complex of the Russian Federation struggled with serious disturbances. The reason was that part of the well-functioning production relations and network of scientific research institutes ended up abroad, or as a result of the geopolitical realignment and the end of the Cold War, the state procurements and foreign orders for the military industry fell back like a landslide. The Russian leaders, apart from the consolidation of internal social-economic difficulties tried to pay enough attention to the Armed Forces, their requirements in military equipment (new, renewed, modernized) and to order armaments from the military–industrial companies.
- (4) By now the Russian MIC has approached, or even reached the upper limit of its production capacity, therefore the fulfilment of the state orders, aimed at the re-armament of the Armed Forces – to accelerate this process substantial budgetary resources were allocated – and the growing demand for the conventional military equipment on the world market have made the reform of MIC unavoidable. The military industry as the leading sector of the Russian economy has direct impact not only on ensuring the security of the country, but on the international political-economic prestige of Russia and the ability to realize its global and regional interests. The Russian leadership – instead of self-reliance – wants to deepen the military–technical cooperation with the industrially developed countries step by step, first of all with the West, which can provide additional financial resources (investment) and high technology for the Russian military industry. This way MIC could close up to the world standards.
- (5) The multi- and bilateral military–technical cooperation between Russia and NATO-countries is expanding gradually from year to year, mutually fruitful and advantageous relations (R+D, production) are created in more and more areas. It testifies the Russian approach that the common challenges, military threats and risks could be responded with common efforts and reliable military force. The Hungarian–Russian military–technical cooperation is one segment of the above-mentioned relations. Considering the fact that the portion of the Soviet-Russian-made military equipment in the HDF is still high and they ensure important military capabilities, it is my assessment that in the future it would also be necessary to maintain balanced military–technical cooperation with the Russian side. An important element of the Hungarian–Russian military–technical cooperation could be the establishment of a regional repair facility (base) and spare parts depot, and the creation of joint venture companies –taking into

account the interests of NATO at large – producing mutually developed military and dual-use devices, or the cooperation of specialists in scientific-research areas, representing mutual interests.

6. NEW SCIENTIFIC RESULTS

Based on my accomplished research I consider as new scientific results the following:

- 1. Studying and analyzing all published security and defence policy documents approved during the modern history of Russia I have testified that:**
 - **Russia intends to re-establish its great power status relying on its economic power, available resources of strategic raw materials and nuclear power position. It is going to play a decisive role in shaping the world policy;**
 - **Russia prefers to establish a multipolar international security system, built on principles of international law, and following the tendencies experienced in the world policy the Russian Federation wants to support its strategic interests with credible military force.**

- 2. I have explored the features of transformation of the Russian Military–Industrial Complex since 1992 up to the present and certified that the development of the Russian Military–Industrial Complex plays a determinative role in providing military–technical equipment, armament, set by the documents of security and defence policy. I have proved that the continuously expanding state order and procurement requirements of foreign countries can keep the Military–Industrial Complex on a sustained growth track.**

- 3. I have outlined and deduced the prospective tendencies and priorities of the projected development of the Russian Military–Industrial Complex by 2020 and I have verified that Russia in order to increase its security, to arm its Armed Forces with modern conventional military–technical equipment (armament) and to update its military industry technologically will deepen military–technical cooperation with the industrially developed countries (among them, first of all, with the NATO-countries).**

- 4. Based on the military–technical development tasks – laid down in the National Military Strategy of the Republic of Hungary – and the prospective tendencies and priorities of the development of the Russian Military–Industrial Complex I have specified those perspective fields where the Hungarian–Russian military–technical cooperation would be necessary and possible and its results could be implemented directly in the military–technical development of the Hungarian Defence Forces, thus ensuring the fulfilment of home-defence and NATO-related tasks at a high level.**

7. PRACTICAL AVAILABILITY OF THE NEW SCIENTIFIC RESULTS

Presentation of the analyzed and evaluated documents of security and defence policy and their impacts on the development of Russian military industry in chapters of dissertation could be interested for experts and researchers, dealing with security and defence policy of Russia.

Collected from different information sources and database details, facts of military–technical cooperation between Russia and NATO-countries, in my opinion is a “filling a gap” description and contrary to popular belief it testifies the interdependence of NATO and Russia in handling of global and regional challenges. It’s obvious that both sides have certain high technology, what the other side – including Hungary too – could implement cost-effective way in development of its armed forces, in management of common security risks and dangers.

Previous results of the Hungarian–Russian military–technical cooperation and outlined its future areas – detailed in the last chapter of dissertation – could serve as a stronghold for experts and decision-makers involved in military–technical development of HDF. My recommendations (specified armaments categories of conventional weapons) related to procurement plans of HDF based on analysis of international arms trade, could considered by decision-makers as a reference.

8. RECOMMENDATIONS

In the dissertation published charts, tables and maps could serve as authentic arguments for experts and researchers, dealing with Russia.

The dissertation could be included into the training and educational programs of Zrínyi Miklós National Defence University. Experts of civilian and military national security services – dealing with security and defence policy of Russia – could scroll my dissertation with interest, helping them in their every day activity with useful and confirmatory information, data and sources.

9. PUBLICATIONS’ LIST OF ASPIRANT RELATED TO THE TOPIC OF DISSERTATION

1. Reform of the Russian Military–Industrial Complex.
Felderítő Szemle 2005/1. pp. 120–126. ISSN 1588-242X
2. Development directions of the conventional armament of the Russian Armed Forces by 2012.
Felderítő Szemle 2005/2. pp. 83–89.
3. Changes of Concept of Security Policy of the Russian Federation since 1992 up to the present.
Felderítő Szemle 2006/1. pp. 17–26.
4. Content of military–technical cooperation between Russia and NATO-countries.
Felderítő Szemle 2006/4. pp. 79–85.
5. Presence and perspectives of the Hungarian-Russian military–technical cooperation.
Új Honvédségi Szemle 2007/11. pp. 22–31. ISSN 1216-7436

6. Russian Armed Forces – On threshold of a new reform.
Felderítő Szemle 2009/1. pp. 125–130.
7. Presence and perspectives of the Hungarian-Russian military–technical cooperation.
AARMS 2008/1 Vol. 7. pp 143-154. ISSN 1588-8789
8. NATO Training Mission – Iraq.
MK KBH Szakmai Szemle 2008/Special Issue pp. 38-44.
ISSN 1785-1181
9. Scientific-professional conference:
„Prospective changes in the NATO-task system for the next decade”
ZMNE Budapest, 27.09.2006.
Lecture: Training of the officers in the Iraqi Army
Published: Hadtudomány 2006/4. Second Section 6. Lecture
ISSN 1215-4121, on-line

10. ASPIRANT’S SCIENTIFIC- PROFESSIONAL CV

Born on 5th July 1955 in Budapest. I finished my studies in elementary (1961-69) and secondary school (1969-73) in Budapest.

In the period of 1973-1979 I had studied at the 'S. M. Kirov' Air Defence Artillery Military College (former Soviet Union, Kiev), where I received a diploma of radioelectronics.

I was promoted to the rank of first lieutenant on 20. August 1979 and my first position of service (computer repair engineer) was in Nagykanizsa at 18. air defence regiment. In August 1982 I moved to Budapest and I got a position at General Staff (Second Directorate) of the Hungarian People's Army. In the next period I studied on a special intelligence course (10 months) in Moscow, German and English languages in Budapest.

From September 1990 to October 1993 I served at the Hungarian Embassy in Moscow as assistant military and air attaché. Coming back from Moscow to Budapest I was appointed section chief in the Military Intelligence Office (MIO). In early 1995 I participated in a special course of intelligence analysts at the DIA in Washington D.C. From September 1995 until August 1999 I served at the Embassy of the Republic of Hungary in Vienna as military and air attaché (from August 1997 co-accredited in Bern (Switzerland) too). Later on I was appointed head of division (International Cooperation) in MIO. From June 2001 until December 2004 I served at the Embassy of the Republic of Hungary in Moscow as defence, military and air attaché. During my military–diplomatic service I prepared regularly reports on actual issues of security policy, armed forces and national security services of the host countries.

Afterwards I was appointed deputy director (Human Directorate) at MIO and from December 2005 until June 2006 I participated in NATO Training Mission – Iraq (NTM-I) and trained Iraqi senior officers of Ground Forces in Baghdad (International Airport), parallel I was the senior Hungarian representative in Iraq. In September 2007 I've moved to the Ministry of Defence and took over the position of deputy director of Department for International Cooperation. After the parliamentary elections in 2010 the MoD was restructured and I was appointed director of International Cooperation and Arms Control Office.

From September 2004 I've studied on correspondence training at PhD Institute in Military Technology of Zrínyi Miklós National Defence University (ZMNE). I've accomplished the prescribed requirements of PhD Institute and for me was issued the Absolutorium of PhD training. During my PhD training and after then I published 9 articles in professional journals, most of them are connected to the theme of my dissertation and gave lectures on the same topic.

Budapest, 23rd May 2011.

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