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THE PROBLEM OF INTEROPERABILITY OF POLISH FORCES WITH NATO

BY

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THE PROBLEM OF INTEROPERABILITY OF POLISH FORCES WITH NATO

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ABSTRACT

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Following the collapse of the Iron Curtain in Europe Poland’s interests lay in rejoining the Western European cultural society - an interest which always existed in Poland’s history except for the last forty-five years. In order to facilitate this desire Poland realized the need to create a stable and fixed security system in Europe, since the order established at Yalta had disappeared. From the beginning of the institution of a democratic government in Poland, the NATO Alliance was considered the only stable factor in this part of world. The presence of US forces was seen as a precondition for the stability and security of the region. The Polish eight year effort to gain acceptance to join NATO succeeded in 1999. It accelerated a difficult period of transforming not only for military structures, but also for the entire nation as a whole. This paper will attempt to focus on the primary challenges concerned with the interoperability of Polish military forces with those of the other nations who belong to NATO. While the principle areas have been identified, some delay will take place before complete integration is completed. The purpose of this document will be to define some of those areas which require further effort before meeting acceptable standards.
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THE POLISH VIEW ON SECURITY IN EUROPE.

The admission of Poland to the North Atlantic Treaty Organization (NATO) corrected the division of Europe that began in Yalta in 1945. The advantages gained by Stalin through the subjugation of Eastern and Mideastern Europe to communist rule determined the future development, history, as well as the fate of the Polish people for decades. It was only the failure of an ineffective and inefficient Soviet economy that ultimately caused the "states of the socialist camp" to free themselves of Soviet dominion and begin the determination of their own sovereignty.

For Poles the historical meaning of March 12, 1999 has significance in more than one dimension. It should be measured not by tens of years but in terms of centuries. Thus the geopolitical situation in Poland changed along with NATO admission. Poland, geographically located between Russia and Germany, has been threatened by aggression from both east and west. During the last three hundred years in particular, the neighboring aggressors determined the course of Polish history. In fact it has only been during the twilight of the 20th century that a new political order emerged in Europe with Poland taking part. Poland now has equal status, guarantees of secure development, and as members of NATO, together with Germany within the same world defense structure with the United States.¹

The transformation of Poland's immediate and more distant international environment – emergence of new neighbors, intensification of the integration processes in the European Union and strengthening of NATO's role in Europe – have caused Poland to establish her security policy on three principal pillars.

The first of these pillars is the development of "good neighborly" relations and regional cooperation in Central Europe. Free of territorial disputes and ethnic conflicts, Poland quickly regulated relations with its neighbors. It signed treaties, established friendly relations, as well as agreements on defense cooperation. Additionally, Poland became an active member of a Regional Group, Central European Free Trade Agreement (CEFTA), Council of the Baltic Sea States and the Central European Initiative, which is a gathering of states located between the Baltic, the Black Sea and the Adriatic Sea.

The second pillar is Poland's participation in all-European cooperative arrangements, and support for the UN global system of security. Recognizing the UN's role in maintaining peace and international security, Poland has been an active member, engaged in a number of actions conducted under its auspices, including peacekeeping operations. Poland has also supported the Organization of Security and Cooperation in Europe (OSCE) as the sole all-European forum for security cooperation, contributing to the development of its conflict prevention and crisis management capabilities.

The third pillar of Poland's security policy is its integration with Western European and Euro-Atlantic security structures – NATO, the Western European Union and the European Union.²
In Poland the Atlantic pact is seen as a community of states which in the spirit of solidarity want not only to provide for common defense in case of aggression, but additionally want to build their common future together. Another extremely important point is to develop and maintain everlasting and durable ties within the bilateral agreements of the pact. There are strong transatlantic ties with the United States guaranteed not only by policy but also by the presence of US military forces in Europe.

The next important factor is that the NATO security policy in Europe is effectively realized within the framework of a unifying pact. The Atlantic pact not only gives its members security guarantees, but an insurance policy against attack from external forces as well. As a military force with vast potential it can be, and is used for missions other than article 5, which are necessary for new threats and challenges.\(^3\)

THE MAIN BENEFITS POLAND RECEIVES FROM JOINING NATO.

All of the above-mentioned factors benefit Poland. By joining NATO Poland is able to receive strategic security politically. Additionally, Poland assumes a new status and a position of reliability as a partner in the newly developing European Union. It also presents the opportunity to upgrade Poland's defense system, allow for the modernization of military forces and provides the rationalization for the management of a development process. Cooperation with and participation in NATO's Security Investment Program will also set the conditions for receiving allied funds (and profitable contracts for Polish investors) designated for the development of the Polish defense structure. Merging Poland's military forces into an existing alliance system also creates both the challenge and opportunity for the military industry of Poland to modernize, restructure and enter into profitable cooperation with modern industries of other NATO partners. It no doubt will positively influence the nation's job market and overall economic situation.\(^4\)
THE BASIC REFORMS IMPLEMENTED BEFORE JOINING NATO.

Following the establishment of the new Polish democratic government it appeared necessary to create a new formula for existence in Europe. Most important was the creation of a new security policy for Poland. It would be looked at as a separate state but considered through a prism of the European security system. In this system, after the collapse of the iron curtain, the only reliable military organization remaining was the North Atlantic Treaty Organization. The main goal of the Polish democratic government became the building of a common security system in Europe. Joining NATO became a precondition for Poland in this new environment among many competing factors. The reforms started immediately, and as history taught us in similar occasions there appeared two primary ways of implementing change. The first one appeared within the conscience of the people themselves, and the second was contained in the whole spectrum of structural changes (multi-party system, democratic government, free market economy). After experiencing ten years of these reforms one can say that structural reforms are still being created as they try to find their own place in the new reality with sometimes more and less visible effects. The change within, mentally, appeared as a far more difficult process. For those who participated in the previous regime of power and influence, it appeared impossible to adopt and assimilate the new reality. Their resistance to change became a barrier to many other reforms. Some effects of these can be noticed in the political arena. Also, the cases of incompetence and blunders of certain officials hampered the tempo of some essential reforms and tended to shake the confidence of Poland on the international front. In the beginning, regaining independence came as a surprise for the Polish elite. The worldwide setting at that time opened tremendous opportunities before Poland. However, according to certain intellectuals' opinions these opportunities have been vastly wasted due to lack of preparation and lack of imagination.

Within the military it appeared that reality considerably advanced the consciousness level of some leaders. Despite the tremendous desire to implement the new reform for the military as a whole, in effect the scope of reforms appeared to be not sufficient yet. Two factors determined this situation. First, following the imposition of formal civilian control over the military, and after adopting the new Constitution, both the civilians who became responsible for military direction and the senior military leaders were surprised by the new environment they found themselves in: the civilians due to the new responsibilities they now had to face, and the military leaders, that for the first time, had to deal with inexperienced characters in civilian suits rather than superiors with higher military rank. After ten years as we approach the new millennium one can notice radical changes in the state and its political level. Within the military structures, especially on the operational and tactical level there are still areas that exist in their previous shape without a clear view of change in the near future.

This work summarizes the integration with NATO allies on the sensitive factor of interoperability with military forces. Considering the scope and complexity of the issue, the focus is on the following key areas: doctrine, the people and the command and control (C2) system.
The process of integrating with the NATO Alliance is not only an issue for the military forces but for
the remainder of the country as well. The main general requirements for integration focused on three
main conditions:

- Fulfilling political obligations
- The establishment of civilian and democratic control over military forces.
- Preparing regulations, which enable a unified system of law.

The first group of conditions included:

- The observation of the terms of the Washington Treaty, which documents the Alliance’s strategy
  and establishes the framework document of Partnership for Peace.
- The acceptance of the rule of consensus as the primary means of decision making.
- The obligation for representative attendance in all spheres of allied activities including
  participation in NATO committees and international military operations.
- The opening and maintaining properly manned missions in NATO Headquarters and Supreme
  Headquarters Allied Powers Europe.
- The delegation of a sufficient number of professionally prepared civilians and military specialists
to different institutions of Headquarters, agencies and joint commands.
- The contribution to NATO’s budget and common investment programs, in accordance with the
  size and capability of that country’s ability to contribute.
- The participation in information and intelligence gathering activities (deliver intelligence
  materials for NATO’s purposes), while observing standardized rules for information security.

The second group of conditions included:

- The principle of laws which establishes civilian control of the Armed Forces and a clear division
  of authority in military administration.
- Regulations, which require Parliament to examine defense matters including defense
  spending.
- Civilian rule that accepts responsibility for defense policy.
- The rule of freedom of the press and availability of information to all citizens.
- The existence of a body of professional civilians experienced in defense matters.

The third group included the regulation of all matters concerned with cooperation with NATO, like
delegation of Polish troops to NATO countries and the location of NATO troops, structure, the Polish
infrastructure, territory, customs, insurance, arms usage and other matters.

One can say that the first two groups of problems were successfully implemented, but the last one
still remains to be finalized.

THE POLISH FORCES BEFORE NATO ENLARGEMENT

The transferring character of military forces from a former Soviet model to a democratic society
became one of the main challenges together with the reorientation of other state structures for the new
democratic system. Since previously the armed forces were the military arm of the party, not of the nation, the public opinion and image of a soldier was as an oppressor rather than soldier-citizen. In order to change this there had to be corresponding changes in the nation's laws and state's structures. The earlier alliance with the Warsaw Pact determined the structure of the military, which was too heavy on logistics. Poland had been a territory between the first and second echelon of the Soviet Armies. As a result thousands of our soldiers were devoted to repair of railroads, roads, medical protection, equipment repair, and the supply providers. Thus it was an army with a heavy logistic tail, not for its own purposes. Such forces were overly concentrated along the Oder River according to the doctrine, which presumed an advance scenario of operations prepared mostly from the territory of the East German region. Relocation of the military units was not an easy task for it meant big outlays for building new barracks and new garrisons, and relocating large units from their existing places. Because the economy was transformed quickly following a strong desire to integrate with the European Union, the defense budget was reduced by 2/3rds of its previous amount to 30% of what it was in 1989. The total strength of armed forces in that stage were reduced by half from 406,000 to nominally 243,000 in accordance with CFE ceilings. When the budget was reduced much faster than the actual strength it caused enormous morale problems in the armed forces. Suddenly the readiness level of training decreased as well as the pace of modernization7.

This last factor was necessary to reach the presumed level of interoperability with NATO forces. It became clear during contacts between Polish officers and officers from other NATO countries that Polish military equipment still supported the doctrine from the former reality. Based generally on Soviet technology from the previous 20-30 years it was not equal in any degree to similarly sized nations in the Atlantic Alliance. Even upgrading with the high cost of some of the equipment is not adequate for reaching a cooperation with NATO partners.8

The modernization should not be restricted only to military equipment. The most important factor is preparation of an integrated system of command and control sufficient for the whole country, which is tied to an intelligence system with efficient employment and practical usage. The adaptation of sufficient military structure on each military echelon with the assimilation of NATO procedures is the next modernization requirement. For this factor it is necessary to prepare a sufficient number of highly professional educated people. They have to possess not only a high degree of technological knowledge to enable easy use of electronic and computer technology, but they have to be proficient in their knowledge of the English language. In the opinion of specialists the current pace of the integration process of Polish forces with NATO still remains too slow. The reason was mostly the lack of a complete strategy on this issue in former years (up to 1996-1997) and in sufficient will power in the government and Ministry of Defense.9

THE BASIC REFORM
The integration process with NATO since the establishment of a democratic government was focused on two main areas: reforming Polish armed forces and initiating and developing as much contacts as possible with the other nations of the NATO Alliance.

During the reformation of the military forces, the conceptual foundations were laid for the adaptation of the defense system and national security strategy to the new political and military situation in Europe. The most important documents in this field included: *The Tenets of Polish Security Policy (1992)* and *The Security Policy and Defense Strategy of the Republic of Poland (1992)*, as well as long-term programs for the development of state defense and corresponding budgetary programs. The provisions of those documents provided the conceptual basis for a comprehensive reform of the defense system. The armed forces consequently were reduced from 406,000 in 1989 to 243,000, agreed to in the framework of the Conventional Forces in Europe (CFE) Treaty.

The distribution of military units inherited from the Warsaw Pact era also changed. While 75% of Polish units were previously located in the western part of the country, 10% in the center and only a small part in the east, currently about 45% are located in the West, 30% in central Poland and about 25% in the eastern part of the country. As a result of this change a new Krakow Military District was created.

Starting in 1994, the process of adapting the defense system and the armed forces to NATO standards began. Deep changes in the structure of the forces, as well as in the command and management systems have been introduced. The most significant changes included are:

- Creation of a separate service of Land Forces and establishing its command. The armed services command has been made responsible for training, infrastructure and logistics.
- The development of the concept for a new command and staff structure corresponding to those in NATO countries and its implementation into the forces, first in tactical elements and units planned to be assign to NATO.
- Change of the structure of the division from regiment to brigade-based.
- Organization of two corps of air defense and one corps in the Air Force. Work continues on the establishment of an integrated, civilian-military system of airspace management (Air Support Operation Center).
- Establishment in the Navy of three flotillas of warships and a naval aviation brigade.
- Defense infrastructure modernization including the logistics system to make it correspond to the new tasks of the armed forces and be compatible with the logistic systems of NATO countries.
- Launching of governmental programs of technical modernization of armed forces.\(^{10}\)

The initial contact with NATO started in the early 90's and was mostly diplomatic. In 1992-93 the Polish Ministry of Defense began building a mechanism of regular cooperation with NATO members, to include signing a number of bilateral agreements.\(^ {11}\)
PARTNERSHIP FOR PEACE

Systematic military cooperation with the Alliance has been developing since 1994, in the framework of the Partnership for Peace (PfP) Program. Poland’s participation in this program began upon signing the Framework Document on February 2, 1994. On April 25th of that year Poland was the first state to submit its Presentation Document, and on July 5th, after five months of negotiations, representatives of our country signed the Individual Partnership Program at NATO Headquarters in Brussels.

The launching of Partnership for Peace was in many respects a turning point in the development of Poland’s cooperation with NATO. Poland initially considered the program as a half measure, not meeting our and other countries’ aspirations to gain a full access to the Alliance. Nevertheless it made possible the elevation of these relations with NATO to a qualitatively higher level.

Of great importance for the preparation for membership have been joint exercises in the framework of PfP. The Polish military participated as staff officers, military units or observers in about thirty exercises on different levels carried out in Europe and in the United States in that year. We systematically took advantage of NATO’s education and training offer. In this way we have trained a group of liaison officers who are to maintain contact between our General Staff, Headquarters of Military Districts and Command of the Armed Forces services and the appropriate NATO structures. The crowning achievement of cooperation with NATO in the framework of Partnership for Peace was the participation of the 6th Air Assault Brigade in the IFOR and SFOR operations launched to secure the implementation of the military aspects of the Dayton Peace Agreement for Bosnia and Herzegovina. This participation became a clear signal – well received in the west - of our readiness to meet the demands of NATO membership.

The Polish soldiers serving in the Nordic-Polish Brigade in Bosnia and Herzegovina have performed their tasks well. They have proven their skills and allegiance many times in the period over thirty years serving in UN peacekeeping missions in different parts of the world: the Middle East, Cambodia, Namibia and the former Yugoslavia.

The participation of Polish soldiers in IFOR/SFOR has also provided us with valuable experience in joint action with NATO countries forces. It also can and should be another step toward Poland’s full integration with the Euro-Atlantic security system. We are also aware that IFOR/SFOR, and KFOR too, forges a new shape of NATO.

Since 1995 Poland has been taking part in the PfP Planning and Review Process. In the framework of this process we have made a number of commitments regarding preparation of selected forces for multinational PfP Exercises and operations. Participation in this process is the simplest and most effective way to achieve interoperability of selected military units and elements of our infrastructure. Moreover, experience gained in this way may be used in preparing other structures of our armed forces for integration with NATO.
In the Planning and Review Process, Poland agreed with the Alliance on the principle of interoperability objectives which are to be achieved initially by units selected for cooperation in PfP and then by all our Armed Forces. The following principal interoperability objectives will be pursued:

- Command control and communication in search and rescue operations (SAR).
- Interoperability of air-navigation systems and airfield procedures.
- Language requirements for staff officers.
- Friend – or – foe identification systems (FFI).
- Logistical support.

While participating in Partnership for Peace programs since 1994, Poland has also broadened cooperation with NATO member countries, in particular, tightening ties with their armed forces. Our relations with some of the western countries are already assuming an allied character.

Of great importance in this process has been cooperation with the United States, Germany, France, and Denmark.

THE POLISH FORCES AFTER ENLARGEMENT (ADVANTAGES AND DISADVANTAGES)

The Polish armed forces will receive a new form according to report issued by special Inter-Ministerial Board for National Defense Organization. The peacetime Polish Armed Forces will have 180,000 soldiers. Three military services are planned: Land, Air, and Sea forces. Each would have Combat Service Support and Territorial Defense units to include cadre and newly created units. They will be more mobile and have uniform locations throughout the country. It would be a 60% professional army with significantly expanded over-times contracts for conscript soldiers.

In the Polish military state defense system a dominant role is played by the Land Forces organized in two Military Districts. Operational troops subordinated to the Military District commanders are organized in division-structured corps formed during a period of crisis. For experimental purposes troops in one Military District were organized within a brigade structure. There are developed airmobile units comprising an airborne –assault brigade, air cavalry brigade and land forces aviation with multitask helicopter regiments.

The reshaping of the Air Force has been planned in accordance with construction of the uniform air defense system that teams up potentials of reconnaissance, command, electronic warfare and active combat and support means owned by Air Force, Army and Navy. During construction of the new Air Force model, specialized aviation has been removed for the sake of multitask aviation.

The combat composition and structure model developed for the Navy did not assume any model changes. Its main element would be forces of combat ship flotillas (assault and coastal defense) and an air brigade. A new element of combat potential has been strengthened by the creation of coastal rocket squadrons.

Some changes have been planned in logistics. The aim was to liquidate units and equipment scheduled to operate on an external front. Another goal was to modernize commanding structures and
adjust the support potential to the needs of the armed forces and defense budget capabilities. It has been assumed that every military district would operate as an autonomous logistic region including combat service logistics that uses stationary logistical resources.

New quality needs concerning the Armed Forces reform forced the adjustment of the professional military education system to the new structure. The aim was to rationalize its structure, introduce new solutions to education units, and improve educational effectiveness.\textsuperscript{13}

It is assumed that in the new European security environment the main tasks of the Polish Armed Forces will be to:

1. Preserve the ability to solve a local conflict within or around Polish borders with the involvement of relevant combat formation comprising various Services under a national command, to include:
   - Maintenance of an integrated reconnaissance system in uninterrupted operation, using needed forces and means owned by all Services comprising radio-electronic, air and naval reconnaissance systems to allow immediate counteraction against any violation of air or sea border,
   - Maintain an adequate combat readiness system, mobilization base and mobilization readiness system,
   - Maintain the permanent ability of strategic state border protection and crisis reaction,
   - Maintain the ability to defend state territory, both unilaterally self-reliant and within an alliance,
   - Maintain strategic and operational level commands, staffs and supporting units manned sufficiently for peace time command and to allocate staff for war-time command posts.

2. Gain strategic, operational and tactical cooperation ability fully integrated with NATO armed forces, to include:
   - Cooperation with support forces that in case of aggression against Poland could be deployed in Poland and operate under common commands using Polish defense infrastructure,
   - Cooperation within combined NATO Armed Forces formation outside Polish territory in case of aggression against another Member State.

Taking into account the above tasks it was assumed that the target strength of the armed forces in the latest version of program (September 1999) would be 180,000 soldiers (60\% professional). We intend to change the personnel rank structure: 30\% officers, 30\% warrant officers and 40\% non-commissioned officers. We intend to steadily increase the number of contract soldiers. Their share should reach the level of 15\% officers, 30\% WOs and 55\% NCOs.

The scheduled reduction of manpower and military infrastructure by at least 20\% would provide funding necessary to build the facilities needed for cooperation with NATO troops and to increase the share of modern technical equipment.

The new character of threat facing Poland and the tasks facing our Armed Forces leads to a general conclusion that future Armed Forces should be composed of the two following main components:
• A mobile component that is able to perform tasks throughout Poland and abroad, both self-reliant and as a part of an Alliance formation.

• A territorial defense component that is able to put up a fight, being able to defend its own territory.

Priority tasks for Land Forces should be the creation of a Rapid Reaction Force (RRF). These forces should be developed as airmobile units to be used in PfP and other international missions. There is a need to increase mobility and firepower of operational forces (first of all by introduction of more modern APCs and the creation of land forces’ aviation).

Primary tasks for Air Forces should be the improvement of air traffic control by the creation of an integrated civil-military command center and air operations support center. The effectiveness of the Polish integrated air defense system should also be increased. Replacing currently used aircraft with multitask ones and the introduction of surface to air missiles can do this.

The Navy has to complete construction of a newly automated command system and the increased firepower of naval assault ships. Another task is to strengthen defense forces by the creation of coastal rocket units. In naval aviation we have to introduce new helicopters of various types.

As far as the preparation of Polish Armed Forces for tasks performed within integrated NATO military structures is concerned, we have defined the following directions:

• to take actions that will allow us to:
  - have more similar combat readiness and mobilization systems,
  - increase command effectiveness and
  - introduce operational usage and combatant support principles,
• gain reconnaissance and air defense compatibility,
• adjust the Polish military personnel training model to the NATO model,
• gain interoperability with NATO naval forces,
• modernize logistical systems,
• introduce changes concerning cartography.¹⁴

VISION FOR THE FUTURE: THE 15 YEAR PROGRAM

Taking the above mentioned notions into account, the Polish Government has prepared a 15-year program based on a prognosis of possible threats to national security and to achieve interoperability with NATO forces. The chief objectives of the program include:

• improvement of the command and control system on all levels,
• modernization of basic weapons and equipment to bring them closer to NATO technological standards,
• ensuring maximum possible mobility of the armed forces
• reduction of the professional military personnel to about 180,000 (that is 0.5% of the population),
• bringing the level of professionalization of the armed forces to about 60%,
• cutting the length of the conscript service from 18 to 12 months,
• adaptation of the military system to the new requirements,
• increase of funds allocated for the armed forces,
• creation of a modern logistical system.
In consideration of full cooperation with the Allies the program also provides for:
• the establishment of the combat composition of the armed forces on two principal elements: operational forces (committed to NATO) and the territorial defense forces,
• ensuring host nation support capability,
• readiness to accept large quantities of Allied combat forces supplied by land, sea and air,
• preparation of selected units in each of three services to become part of NATO’s rapid reaction forces,
• preparation of selected units for operation within multinational corps.
All objectives and requirements of the long-term program have been included in the current priorities of development and functioning of each of the armed services. Eleven programs of technical modernization have been adopted. Many of those programs, including those concerning reconnaissance and radio-electronic warfare equipment, command and communication equipment, air defense, air forces and navy equipment include concrete development plans which fully take into account the needs of integration with NATO.
In general, the implementation of the assumptions of the 15-year program of modernization and development of the armed forces will result in a smaller but more mobile and well-equipped force. It will also fundamentally improve the ability of Polish forces to contribute to NATO’s collective defense and new missions.15
The above mentioned vision adopted by the Polish government as a plan of modernization of its armed forces, creates new challenges not only for the military forces, but, also for all state structures. The main benefit is an attempt to create a vision of future conceptual and functional structures of the armed forces. Poland will have to report to the new Allies the results of maintaining her obligations and the particular terms adopted, what in turn will stimulate efforts of its implementation. The Polish government realizing this program should benefit from the concentration of works and funds in previously adopted areas, and from education on state defense matters for members of Parliament and Government.
However, there are some shortcomings and gaps in the vision and the 15 year program. It provides a fairly clear direction at the state level but it fails to clearly define the ways and means to fully accomplish the program. In order to reach interoperability at the operational and tactical levels more effort will be required. Merely changing the structure without properly educating the leadership responsible for implementing this major transformation, creates doubts about the ability of the Polish
armed forces to reliably transform across all levels. The next section of this paper highlights the key factors, which are predominant on the operational and tactical levels.

INTEROPERABILITY – THE PRIMARY INTEGRATION FACTORS

Considering interoperability problems we have to be sure that we are speaking on the same topic. Joint Publication 1-02 (JP 1-02) provides the following definition:

"Interoperability – the ability of systems, units or forces to provide services from other systems, units, or forces and to use the services so exchanged to enable them to operate effectively together."

Using this definition within its military context we can see that interoperability enables different systems or forces to find a common level of cooperation. Intense integrated military structure is designed to fulfill various missions in ambiguous situations. Each component of the structure must reach a high level of integration. The term is similar to computer science on the integrity of processors used to build complex structures able to find a solution after performing highly complicated operations. The higher the integrity of processors used within this structure the higher level of effective output can be reached. Currently the military structure on different levels resembles such a structure. The final effect being that it has to perform with perfect integrity with all other elements. Integrity in this area is the result of interoperability among internal components that enable them to act in accord.

Polish sources dealing with these problems are generally in full agreement on the core of the problem. Differences occur during the definition of the ways to reach the final result and on implementation.

THE KEY FACTORS CONCERNING FULL INTEGRITY WITH NATO FORCES

The adopted plan of development for the Polish armed forces will determine the key factors on integration with NATO forces:

- Defense planning
- Interoperability
- Standardization
- Adaptation of the military infrastructure
- Modernization of military equipment
- Education and training of military personnel

Collective defense planning plays a key role in ensuring that NATO is able to perform its function related both to collective defense and the new missions and tasks. The first step in Poland's preparations for joining NATO's defense planning was its active participation in the Planning and Review Process. This allowed Poland to cooperate with the Alliance in planning forces and resources to be used in joint exercises and the possible peace-support operations conducted in accordance with PfP principles. In late September 1997, Poland submitted to NATO Headquarters its reply to the Defense Planning Questionnaire (DPQ). The DPQ is a principal planning and reporting document prepared by the each
NATO member state. The Polish reply contains a comprehensive description of the next five years. Also, in the DPQ Poland presented its intentions and abilities regarding its contribution to NATO. It has declared its willingness to commit all operational forces to NATO's integrated military structure. From initial accession, about one third of those forces will be assigned to NATO. Those forces will reach full interoperability by 2002. Other operational forces were earmarked for NATO.

A key task for the Polish armed forces is reaching the ability to effectively interoperate with forces of the other NATO countries. This issue has been the center of attention since the very onset of Poland's military cooperation with NATO. Of special significance in our efforts to reach this goal has been the Planning and Review Process (PARP). Currently, Poland is taking part in the second PARP cycle. During these cycles Poland agreed with NATO to implement a number of interoperability objectives. These objectives mainly included such areas as:

- Command and control
- Tactics and operations of forces
- Navigation and air-management procedures
- Logistics

Our participation in PARP has already produced significant results:

- New combat readiness systems have been introduced, similar to those used in NATO countries.
- The first phase of adopting Polish command systems to NATO standards has been completed.
- Significant progress has been noted in interoperability of the reconnaissance systems. It's possible for Poland to meet all the conditions necessary to integrate its reconnaissance systems with those of NATO in two to three years.
- Conceptual works on the reconstruction of the air defense system according to the interoperability requirement have been completed.
- The Polish Navy's has begun to develop minimal interoperability with NATO naval forces. Areas include planning of operations, tactical principles of maneuver of naval tactical group, use of weapons and the command systems.
- Logistics modernization Works is progressing. The Defense Resource Management Model (DRMM) is being introduced into the armed forces.

Interoperability is one of essential levels of standardization which plays an important role in ensuring effective cooperation of Allied armed forces and, in effect, in providing effective collective defense at minimum cost. Poland fully accepts NATO's standardization policy and intends to take an active part in its development. To make this possible, since 1996 a coherent system of military standardization services has been created in Poland. Its principal current task is to collect, distribute and
implement NATO standards in the Polish armed forces and defense industry. The standardization services includes the Office for Military Standardization, the Bureau of Military Codification, the Committee of Military Standardization and the Committee of Standardization of Armaments, and Military Equipment. From the moment NATO started to provide partners with its Standardization Agreements (STANAGS) and the relevant Allied Publications, Poland has started their introduction into its defense system. Out of about 1200 NATO documents of this type, about 700 STANAGS and 135 AP's are currently at various stages of implementation.

The current strategic situation in Europe does not require permanent forward deployment of a significant number of allied troops. Therefore, an enlarged NATO - aside from ensuring the necessary integration and interoperability of its forces – will focus its efforts on the development of the necessary capability for reinforcement. Since Poland shares this approach, it attaches particular importance to the necessary adaptation of its military infrastructure and the development of a host-nation-support capability. This is a necessary condition for effectively hosting, and supporting Allied reinforcements on Polish territory, should a need to deploy them arise. Poland has the most developed military infrastructure of the Central European states. A significant part of its resources can be made available to NATO. Allied units countries started exercising on Polish training grounds in 1996. Elements of the Polish infrastructure have also served various activities carried out in the framework and in the spirit of PfP. By the spring 1999, during the exact time of accession, Poland prepared two airfields, two seaports and two storage bases to NATO standards. In the following years further installations will be prepared for cooperation with NATO.

A special strategic program of technical modernization has been initiated for implementation through the year 2012. The funding was defined directly from the state budget. The first term focused on equipping the Air Forces with modern multi-purpose fighter aircraft. It provides for purchasing over 100 combat/training aircraft and for the creation of an adequate ground support system. The land forces program upgrades the capabilities of armored combat vehicles, and improves transport and sea-rescue capabilities. Units assigned to NATO will be equipped with strike and multi-purpose helicopters. The decision was taken to purchase the first part of the modern 155-millimeter howitzers with fully integrated command and control system, which is the beginning of the modernization of our artillery.

The preparation of an adequate number of competent military personnel is a necessary condition of effective integration with the NATO's military structures. It is also a key factor in the process of ensuring interoperability of Polish armed forces. Since the early 1990s, the Ministry of National Defense has been developing a comprehensive program of education and training of officers for cooperation and integration with the Alliance. Aside from using our own resources, we have been taking advantage of the gradually broadened educational opportunities offered by the NATO countries. Since 1991 Polish officers have been sent to NATO academic and training centers. We have closely correlated this practice with the process of preparing our officers at home – also significantly improved due to a recent reform of the military education system. Officers sent to schools in NATO countries come primarily from those
formations and structures which are currently cooperating, or are in the future to cooperate with the structures of NATO and the forces of the Allied countries. The priorities of education include:

- Postgraduate operational level studies
- Command - staff studies
- Specialist courses and practices
- Language courses and practices.

For example between 1991 and 1997 about 1250 Polish officers completed various studies and courses in NATO countries. No less important than professional education is adequate language training of Polish officers. Our military language - training system has been systematically developed since 1991. Currently it trains about 1100 officers a year (including about 800 in English). In addition, use is also made of the opportunities for language training abroad (mostly in the US, Canada, the UK and France). According to our estimates about 4000 Polish officers speak English, including about 200 who have reached high or medium language proficiency. About 260 officers speak French; about 160 of them are fluent in it. Thanks to the planned intensification of language education, another 3000 officers should be able to take part in different kinds of English courses by the end of 1999. Starting in 1998, Poland introduced the NATO system of assessing foreign language proficiency (STANAG 6001).

THE BASIC FACTORS ON INTEROPERABILITY FOR POLISH FORCES

The four factors of interoperability of the Polish armed forces with those of NATO, mentioned above, were agreeded with Allied authorities and transformed in to a number of military goals to implement respectively in time and in accordance with "Program of Integration with NATO and Modernization of Armed Forces of Republic of Poland in period 1998-2012." The "Program," as the basic project document on military interoperability, defines the main areas to be reached by the Polish armed forces for the possibilities of cooperation. Assuming the engagement of all structures of the state in participating in its implementation is a prerequisite factor. Additionally, according to the official point of view it cannot be a definitive document. Different areas of the state are developing at different paces, and some detailed political requirements (the Kosovo conflict) can change as well. Consequently, the document has to be flexible. It should be easily modified for adjustment to reality and to rationalize the overall integration process. Such an approach yet, brings a danger of conformity, sensitivity to political games, and probability that the plan turns to piecemeal work. Recent new Polish proposals to NATO concerning interoperability goals and the hesitation of the Ministry of Defense to pass its budget are good examples. The display of indiscipline and social crisis within the military as well as the lack of state action on mobilization and adjustment of the territorial defense service structure concept have proved that there is still a lack of a coherent concept on defense matters. In my opinion our effort to prepare for the interoperability of the Polish forces with those of NATO should be concentrated on three primary factors:

- Doctrine
- People
Command and control system.
These factors were depicted in different degrees within modernization programs. Unfortunately, they do not present a clear and coherent concept, and in practice on the operational and tactical levels particularly, there remain areas where these reforms are not implemented. Without a clearly defined goal, the military cannot play its role, and without properly prepared people, and common procedures, and command and control systems any plans can not be implemented.

INTEROPERABILITY FOR POLISH FORCES

DOCTRINE

The new situation demands new guidelines for the implications of military doctrine. Such guidelines for military doctrine are seen as a system of official adjudication of security matters on the state level. Poland's military establishment is now based on a military doctrine formulated in November 1992. However, the discussion at the parliamentary level is still an ongoing process. For the adequate implementation of our new obligations with to the Alliance it is necessary to prepare sufficient state defense policies. Such assumptions were presented and accepted in the "Program" on integration with NATO and modernization of Polish armed forces, but did not have the essential complexity and importance to be considered as a state document. The military have to know what their obligation is during both peacetime as well as during war. Additionally they need to know what will be the future character dealing within a coalition in the designated theatre. A new approach is required for everything, which is included in the categories of threats, and in assumptions concerning the model of military conflict. This will certainly decrease the perceived threat of a direct local conflict and a full-scale war. Indeed it is difficult to identify an enemy risking a direct attack on any of the North Atlantic alliance members. The spectrum of crisis will be broadened. Poland as a member of an alliance might be engaged in solving crises appearing not only in its neighborhood, but out-of-area as well. As a member of the alliance, Poland might be required to participate in conflicts with neutral countries. The threat of terrorism might increase, but to date there has been very little activity so far in Poland. We have to get accustomed to the idea that a threat toward any of the NATO countries will be, to a certain degree also a threat against Poland. In this view Poland's new defense doctrine has to take into account the necessity of clearly defining the obligations resulting from alliance commitments.

PEOPLE

Among the rich spectrum of transformation matters one of the priority roles is devoted to the process of preparing the people. It is beneficial that this problem has found a sufficient place within the reconstructing program. The main areas concerning preparation of people focused on reforming the
structure among military ranks with the priority for NCOs; enabling the wide participation of officers, NCOs and soldiers in numerous PfP exercises and contacts on different levels as well as participation in education in NATO schools and academies. The other important factor includes the wide participation of Polish officers in language training in different language centers abroad. It is a very important and beneficial part of the educational system for our people.

Analyzing this problem it points to concentrating efforts in two main directions:

- Professional preparation
- Familiarity with Allied doctrine and procedures.

Professional preparation demands integrated efforts to prepare as a final product of an integral educational system, a fully worthy and reliable soldier. It should start early with the beginning of education especially focused on learning foreign languages. Efforts should be focused on English because our current experiences with officers speaking others language shows that they are employed on very limited areas. Initial language training during subsequent development during military education could focus mostly on professional matters where a language program should be parallel to specialized training. This kind of training should be aimed at preparing the professional soldier to be able to use and maintain modern military equipment and to deal with situations either as a leader or a staff worker. We are able to create such modernization on the basis of current infrastructure.

Adaptation to the educational and training system of different levels of NATO procedures and the knowledge of NATO doctrine is a difficult and complex problem. We have to resolve a dilemma: should we fully adopt NATO military procedures or base our national doctrine on the creation of a universal doctrine able to contain the new allied assumptions. It is unfortunate that we do not have a clear and precise policy on this issue. The Department of NATO Integration proposed in 1998 the radical reform of our military education system with the aim to integrate it with NATO doctrine and procedures. According to this document the changes should be imposed for the school year 1999/2000. The complexity of this problem shows that we have to change not only the educational and training program, but the instructions, manuals and to prepare a sufficient number of teachers.

The area in which the Polish Armed Forces have achieved the assumed plan is manpower reduction. This significant decline of manpower became a reality. The process however, is without any controls. Those who are most valuable or young, like captains and majors, sometimes even lieutenants have left the military. Moreover most of those who left the army were professional officers from operational units. These units are still deficient in personnel, contrary to numerous administrative structures, which in many cases remains unchanged. Shortages and the lack of stabilization only deepen the frustration of professional soldiers. They know that the vitally essential reform process, which in fact has already lasted ten years, on a tactical level changed the structure of units from regiments to brigades and concluded the reform to the changes of the names. The structure within units has remained the same, still without independence for commanders, with inferior logistics for subunits and for the whole structure. The routine for unit, training system, permanent lack of resources, and in fact the
same inferior equipment all remain without changes. These areas demand improvement on the loss of professional soldiers or it will cause serious readiness problems.

To resolve this issue only a coherent and comprehensive programs can be effective.

COMMAND AND CONTROL SYSTEM

In command and control systems an adjustment has been initiated to the NATO war science theory (regulations and instructions reflecting NATO commanding procedures). Access has been gained to selected NATO radio and telephone communication procedures. Combat area radio-stations have been chosen. Documentation has been worked out and research efforts have been started on operational and tactical level command vehicles. Research and development programs has been started on automated combat command systems and computer-aided command systems. Strategic level digital map compatibility with NATO terms and technology has been realized. The priorities between 1998 and 2002 will be focused on modernization and the increase of the electronic, radio and opto-electronic reconnaissance capabilities. By introducing modern equipment for recognition and identification of land, air, and sea objects, these modernization efforts will focus on the relevant C3 reconnaissance, radio-electronic warfare, air defense, IFF and artillery systems. This will allow the integration of the national reconnaissance and electronic warfare systems, its adaptation to the requirements of cooperation with NATO, and the inclusion of Poland into the European integrated civil-military system of air space management.

As for the command and communication systems, it is planned to exchange the analog devices with digital ones, compatible with those used by NATO, to begin work on the creation of tele-computer infrastructure for stationary command posts to reach interoperability of selected airfields, and to introduce an integrated civil-military system of air space management. This will allow us to integrate the Polish air-defense command system with that of NATO, to automate the air-defense system, to introduce elements of an automated command system in the Navy, and to modernize the armed forces communication system. This program also includes the purchase of modern radio-electronic reconnaissance systems, including sea reconnaissance aircraft, radiolocation stations and radio-electronic reconnaissance helicopters.
THE US VIEW ON NATO ENLARGEMENT

THE MAIN CONCERNS OF THE US

As the world's only superpower the US position on NATO enlargement always presents an important factor for consideration by others. Despite the official stand of the US government one can generally categorize the views on enlargement matters in two main areas: political and military. Political implications generally concern the fear that NATO enlargement can cause on the views of Russia and on the stabilization factor on situation in Europe. The point of view on Russia usually has been controversial. The difference of opinions varies from clearly opposed to enlargement to the opinion that it would provide a great benefit both for Russia and the overall situation.

The typical view from the first group says that the Russians understand NATO expansion will bring a reconfiguration of forces in Europe and they will have conventional inferiority (in contrast to the opposite case during the Cold War). In addition to their own collapsing military capability, Moscow will be forced to relay on nuclear weapons as a deterrent. Secondly, enlargement can bring some kind of imbalance in central Europe giving some countries access to modern and sophisticated militaries, communications and nuclear intelligence, when, at the same time, their neighbors will be denied. It can cause a reaction of nationalism and inflame regional and ethnic conflicts. The third kind of concerns are bound to the future role of NATO. It is not precisely defined now and without a clear understanding of its mission, eventual scope, probable costs, and regional impact it is too risky to opt for a positive decision.25

Some opinions advocate that because the Russian policy is now too ambiguous and unpredictable, NATO enlargement as a hedge against such a policy is worth the risk. Hedging should at least not risk making the political danger more real. It should, therefore, be a contingent response rather than a pre-emptive initiative.26

Stephen J. Blank in his work: "NATO enlargement between rhetoric and realism," writes on the stability and security in Europe after enlargement. Enlargement can improve civil-military relations within state structures in the new democracies, as well as their international treaties, reunite Europe and overcome its centuries old divisions. Finally, NATO should do for the East what it and the Marshall Plan did for the West – create stability, security, democratic transformation and facilitate the growth of prosperity.27 Enlargement for some is considered as a balancing factor to German economic power in Europe.28

On the Russia issue the argument is, firstly, that US leadership in Europe plays a stabilizing role, which efficiently deters Russian revisionism. Secondly, enlargement also strikes a blow for security and democracy in both Russia and Europe via the denial of an imperial option. Thirdly, it prevents a return to nationalized policies and competition.29

Other opinions focused on the stabilization role of the US presence in Europe, and the development of the Atlantic connections in East Europe, which strengthen the situation. As for the states in the middle zone, like Belarus, Moldova and Ukraine, NATO can be a leading force for encouraging
genuine military contacts, not only between the region and the West but also within the region itself. Because the strong revisionist tendency is without clear definition of what will happen in the future, Russia will still try to dominate the CIS. It could be beneficial for the US interest, which in turn believe that enlargement could make the world safe for democracy through a strategy of democratic enlargement and collective security.30

The military objectives focus strongly on the possibilities of achieving interoperability. Firstly they point out that newly assigned members have armed forces designed and organized generally as they were when members of the Warsaw Pact. They lack familiarity with the role of the military in a democratic society and for a democratic government. Their equipment is incompatible with NATO systems, both operationally and logistically, and they cannot communicate with NATO forces. Their operational concepts and doctrine are different, and the functioning of their staffs and others headquarters agencies is not linked with common NATO entities.31

The second problem is the common language. During its 50 years of experience NATO has developed English as its procedural and operational language. For new members it is a requirement to gain fully operational language skills in the future.

The third dilemma is a question of loyalty. No one takes an oath to serve the NATO Alliance. In every Army, Navy, and Air Force, the officers and noncommissioned officers serve first their national authorities. The international commands must develop, then, a belief in a common cause and rely on the voluntary commitment of forces and people to the resolution of a crisis. The different standard of equipment and training can cause a prejudice to ward others’ forces and confidence only in our own which we are sure to rely upon.

The next problem concerns the logistics to support the alliance. Up until now it has been a national responsibility to provide for your own nation’s forces. When a commander commits forces to a combat mission he has an obligation to ensure that the force is supportable. In NATO for the past 50 years, there has not been a major problem because forces were located generally in the areas in which they would fight, and each nation built its systems to support forces in those areas. There are questions now if the new members’ logistic systems will be able support allied requirements.

A final dilemma is the matter of political controls. Decision controlling operations, the allocation and employment of firepower, and the direction of the intelligence effort are today made at national political levels and are strongly influenced by the views, concerns, and sometimes vetoes of coalition partners. The addition of three more voices at the policy and decision-making levels does not ease the limitations now suffered by field commanders.32

Some of the questions are obvious and tough. Will the American Congress pay to modernize the Polish army and bring it to NATO standards? This army is in much worse shape than previously thought in both materiel and personnel, particularly lacking sergeants, the backbone of a modern army. A noncommissioned officer corps for this army has to be created from scratch. The same concern applies to the armies of two others newly accessed members. Who pays?33
The authors of above opinions are agreed that none of those characteristics present unsolvable problems, nor do they imply inferiority of either system, but each is a major change that will require time, money and a psychological acceptance.

THE POLISH RESPONSE

All of the above was considered by Polish authorities before joining NATO. Some of these are still under the scrutiny of the political leadership and seem to wait for final acceptance, and some still demand solutions. It is important to consider the stand of Russia after Poland's accession to the Alliance became real. The enlargement of NATO certainly places a barrier for the expansion to the West, which, for centuries, has been a tempting prospect for Russian political élites. It excludes the area of Central Europe from plans of political and economical domination, as well as from possible military aggression. Therefore, the admission of new members to the alliance will produce a historic change in Russia's attitude towards these areas. As a consequence, it will be necessary for Russia to develop an entirely new foreign policy with regard to Central Europe. Whether this policy will be based on partnership and equal rights or will be an unfriendly or hostile one, will not depend exclusively on NATO's opening to the East, but also on the maturity of Russia's élites to begin a dialog about European security. This option of possible closer cooperation with Russia after NATO enlargement was articulated by the President of Poland and the Minister of Foreign Affairs.

In the military area most Polish opinions present the view that in the period of transformation we have to focus on the preparation process of our people, upgrading and changing the command and control systems, and replacing the aging military equipment and armament. The Polish General Staff clearly expresses the opinion that based on 40 of years experience taking part in peace-keeping operations the decisive factors to reach effective cooperation and interoperability with the Western military structures are procedures and command, control and communication. The urgent need for a new military doctrine was voiced by the parliamentarians and members of the national defense committee. It should be based on our sovereignty and has to include the ability to cooperate within the Alliance. The demand for a coordinated effort on education programs for military schools and a sufficient program for military members able to act within the alliance is articulated among many current discussions. The strong attention paid to logistics, which for some years is under reconstruction, relies on financial support for its success.

Analysis of the costs of the integration process shows that it will relay on a high level of Polish economy and should be extended in time. Here the defense administration did not submit a reliable concept for funding military forces. They rely only on manpower reduction even to the ceiling of 150,000 as the best remedy. We have to accept that the adaptation process to NATO standards is a long-term process lasting for decades. It includes a law system, which has to be regulated, and cohesion with the NATO one. In real life we are aware that we have stepped on the very beginning of a road. As some
military exercises on the operational level showed, the difficulties of interoperability on this level covered practically all spheres of combat operations. This should open areas for further discussion. 42

CONCLUSION

Poland's accession to NATO constitutes a serious internal challenge as it implies a necessity to adjust the country's defense system to an entirely new role comprising the fulfillment of commitments to the allies and, at the same time, realization of so vital a function of the system, i.e., ensuring the country's security.

Poland's participation in the Alliance involves a number of advantages:

• Establishing an entirely new dimension of the national security strategy; clearly determined principles of the defense policy, military strategy; tasks for the armed forces.
• Providing greater possibilities to influence the transformations of the political and military architecture.
• Given the positive scenario for NATO enlargement, providing an opportunity to consolidate the historical process of reconciliation and development in relations with Germany, and to establish a real partnership in relations with the countries located in the East: Russia, Ukraine, and Belarus.
• Ensuring a stronger position on the efforts to achieve Poland's membership in the European Union.
• Ensuring irreversibility of the process of economic reforms (fostering investment and opening to West European markets).
• Fostering a greater feeling of security among the people.

The challenge of NATO integration is not so much a question of military equipment modernization but of building a capable military institution that is supported by society and government. 43 A comprehensive and competent concept of armed forces within such an institution is the predominant factor. This seems to be the most important aspect of building a new vision of the Polish defense structure integrated within NATO.

To sum up, Poland's membership in NATO constitutes a very serious challenge for the state, its economic and legal system, for the Polish armed forces, and for the entire nation. Nevertheless, by making this serious effort, Poland may considerably accelerate the process of building a democratic, stable, and safe state, as well as to make the process irreversible. 44
ENDNOTES


4 Bronislaw Geremek, “Członkostwo w NATO jako czynnik bezpieczeństwa Polski,” Mysl wojskowa, no.4 (1999); 26.


6 Krystian Piatkowski, Polska i NATO w przededniu rozszerzenia (Warszawa, BPI MON, 1998), 83-88.


8 Bezpieczeństwo Polski w zmieniajacej sie Europie, (Warszawa-Torun: Wydawnictwo Adam Marszalek, 1994), 42.

9 Piatkowski, 95.


12 Ibid., 25.


14 Ibid., 29.


16 Joint Publication 1-02, 10 June 1998, 231.

17 Report of Poland’s Integration with NATO, 22.

18 Ibid., 23-26.


28. Ibid., 71.

29. Ibid., 82.


31. Ibid., 48.

32. Ibid., 52.


39. Ibid., 43.

40. “NATO kosztuje”.


44 Security of Poland in Changing Europe, 72.
BIBLIOGRAPHY

Articles, Books, Papers


Military Publications

