### Combating Terrorism and Its Implications for the Polish Armed Forces

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### Introduction: The Antiterrorist Campaign as a Factor of Change

The dynamics of the international security environment of the last fifteen years are reflected in the profound transformation of all elements of the national security structures. These developments have been initiated and have been most visible in the area of the military postures of states, particularly in the Northern Hemisphere, influencing all heretofore known theoretical conceptions of national defence and security strategies and, consequently, the entirety of national military structures. In the Western world, the transformation was linked to the "peace dividend," which emerged after the disappearance of the main security threat posed by the Warsaw Pact and the Soviet Union. In the Eastern Europe, the change was even more profound, as the same desire to consume the peace dividend was further boosted by the pressure of dwindling economies, which enforced a rapid reallocation of resources from military security toward the civilian economy. This trend was consonant with a strong desire of a large part of Eastern European societies to speed their economic recovery, enabling them to catch up with the affluent Western societies. This political factor of strategic importance brought the first impulse of change in international military relations. It permitted the end of the East-West arms race, the reduction of defence outlays, and a decrease in the importance attached to the concept of territorial defence based on mass standing armies.

The second factor of change in the international military and security sector – the *factor of integration* – is the consequence of the first, and has both political and military meanings. Its influence was exerted along two axes. The first one stemmed from an indigenous desire of nations, predominantly those of the postsocialist Eastern European ones, to change their armed forces and the ways of their management to make them compatible with the political and technical standards of the international organizations (NATO, EU) with which they wanted to be integrated. This desire for integration enabled the old members of the two organizations to raise a range of political, managerial, structural, and

technical conditions for such integration. The conditionality and the substantial assistance programs provided by the Euro-Atlantic community in the framework of Partnership for Peace programme, later evolving into a Membership Action Plan augmented by various other bilateral and multilateral arrangements, helped to intensify the transformation efforts by the candidates. The second aspect of the *factor of integration* was a direct result of the inclusion of the new members into the organizations, which had to adapt their objectives, structures, and *modus operandi* to the new international conditions. Moreover, the process of enlargement also influenced the military structures of the old members.

The third specific factor of change in the armed forces was that of a revolution in military technology or, even more comprehensive, a revolution in military affairs. Because it was based on a general progress of advanced weapons-systems technology, incorporating the advances of the "information age" and of material technology, it has had a somewhat delayed effect on the armed forces of less developed states. The demands of modern military technology pose particular burdens on the states under democratic transformation, like all Eastern European states, whose economic situation requires that attention be given first of all to civilian economic needs. The Eastern European countries, desiring to integrate their armed forces with the advanced armies of NATO and EU states by making them fully interoperable, must undertake particularly strenuous efforts in terms of both their expenditures and their structural transformations.

An entirely new factor of change in the military domain, associated with the growth of the international organized crime and the global terrorist threat, appeared in the last few years. The challenges to the armed forces posed by this phenomenon stems from the asymmetry between its forms and appearances and the traditional organizational, doctrinal, and technological features of the state-organized armed forces. The security challenges posed by criminal elements and various terrorist groups were heretofore met by traditional, predominantly national, law enforcement services. With the advent of new types of threat, able to undermine the functioning of entire states by jeopardizing the critical infrastructure, to inflict mass casualties - particularly when linked to weapons of mass and indiscriminate destruction - and able to act on a global scale, the role and functions of the armed forces changed profoundly. While still an indispensable element of state security policy, the armed forces lost their primary role in the implementation of this policy. In their new role, they have to cooperate more closely with all other elements of both their national security structures and also within a multinational response framework. As the international crime and terrorist actors are often linked to the so-called "failed" or "weak" states, they cause a rupture of the international stability and security, necessitating a wide multinational and multifunctional reaction in form of peacekeeping, stabilization, nation building, or even economic recovery operations. In view of this expanded spectrum of international response to the new challenges, other services, like law enforcement institutions, border guards, intelligence agencies, and various civil administrative services assume a role of partner to the armed forces in providing for security and stability.

All these factors of change act together, with different strengths, on the respective national security sectors, including the armed forces. It is therefore difficult to specify which of them has a more profound effect on the military transformations happening today on a global scale.

The processes of change of the Eastern European armed forces take place against the background of several other political, economic, and social transformations. The direction and pace of change in the military domain is functionally dependent on more general trends. Obviously, the economic situation has the most profound effect on the programs of change. Given the military reforms and restructuring of the armed forces over the last fifteen years, the new requirements posed by the ever-changing agendas of NATO and the EU often heavily tax its member states and their armed forces. The rising demands of the armed forces, anxious to speed up modernization processes, do not seem to go in step with the prevailing positive public perception of well-established international security and stability on the European continent. In the majority of the Eastern European countries, the threat of terrorism and, to a lesser extent, organized crime, is not yet directly imprinted in the public perception as crucial threat that calls for special efforts. The still remaining instability in a number of locations in Southern and Eastern Europe seems manageable by the existing and traditionally organized armed forces. Some of these new requirements can also be seen as intrinsically contradictory: the tendency to shape up the armed forces into more expeditionary and lighter formations undermines their traditional and sometimes still justified desire to maintain ample territorial forces. Moreover, the inability to keep up with the technological advancement of the allied forces relegates them into the role of secondary partners, providing only some "niche" capabilities, to the detriment of their remaining national forces. The requirement to field highly skilled, professional forces contradicts their traditional system of a conscript-based army, which provides for trained reserves needed in the event of mobilization.

In general, it may be assumed that the antiterrorist campaign of the last few years was until recently a less tangible or nonexistent factor in the dynamics of the military transformation of the Eastern European states, particularly those not involved in such a campaign on their own national territories. This situation has now changed, due to the growing

involvement of Eastern European states in international military operations, like those in Afghanistan and Iraq.

#### The Ongoing Transformation of the Polish Armed Forces

The Polish armed forces are among those going through far-reaching alterations. The process of transformation dates back to the end of the 1980s, when the rapid decline of the national economy, caused by a fundamental crisis of the socialist state, necessitated adaptations of the overmilitarized state structures. These "adaptations" were dramatically accelerated when the political revolution swept aside the old political system and the planned economy. Poland set as its strategic objective its political, economic, and military integration with the democratic world. The evolution required a full decommunization of the armed and security forces, fundamental changes to the legal system, and the creation of an efficient and democratic military and security sector management system, all designed to help raise the level of protection of individual rights. Due to the successful incorporation of these new standards, Poland joined NATO and the Euro-Atlantic community of states at the end of the 1990s. 158

After five years of relatively intuitive changes, responding to immediate needs and political requirements, the process became more organized in 1997 by Poland's institutionalization of its first twelve-year Program of Development of the armed forces, coordinating the restructuring with newly emerging security needs and balanced against the modest financial resources available. Despite various efforts, the armed forces were still "old-fashioned"—being too numerous and top-heavy, with biggest share of their resources consumed by the personnel costs and leaving too small a part of the budget for technical modernization. A lack of training and the growing obsolescence of the weapons technology reduced the armed forces' operational readiness and failed to provide the necessary level of competence for officers and soldiers. The first multivear program was not fully implemented. This first attempt on a well-planned restructuring of forces proved to be too expensive. Moreover, it soon became inadequate in view of new requirements posed by the membership in the alliance.

Taking into account the new financial parameters and the tasks set by the alliance defence planning, the next Program of Development of the

A. Karkoszka, "Defense Reform in Poland, 1989–2000," in *Post-Cold War Defense Reform. Lessons Learned in Europe and the United States*, edited by Istvan Gyarmati and Theodor Winkler (Washington, D.C.: Brassey's, Inc., 2002), 165–188.

Polish Armed Forces was formulated for the years 2001 through 2006. Its main thrust was directed at cost reduction, through the elimination of obsolete equipment and the abandoning of superfluous military infrastructure. Additional goals were the reform of the education system and the reduction of administrative overhead. The results were encouraging: the armed forces abandoned some 6,600 pieces of old weapons and other equipment (828 tanks, 460 pieces of artillery, 62 aircraft, and 2,900 transport vehicles) and some 20 percent of the infrastructure was returned to the civilian administration. After releasing 54,000 soldiers from the ranks, the armed forces reached its planned level of 150,000 soldiers. During 2001 and 2002, some 760 military units were closed down, an additional 800 other units were restructured, and some 160 were formed. In sum, 52 military garrisons disappeared. All these activities substantially decreased the operational and "vegetative" costs of the armed forces. On the other hand, the process (support of reduced professional cadres, relocation of units and equipment, and preparation of the infrastructure to be taken over by the civilian sector) consumed much of the existing financial resources. The efforts to diminish the costs of the armed forces were further hampered by the downturn of the national economy and the resulting reduction in the state's spending power. The defence budgets in the years 2001 and 2002 were cumulatively 700 million dollars short of what was planned. This sum corresponds to the amount annually allocated for the technical modernization of the armed forces. The 2001 and 2002 budgets permitted only the modernisation of several PT-91 tanks, the old NEWA antiaircraft missiles, several Mi-24 helicopters, and a number of radiolocation systems for several models of aircraft. Despite the limited resources, some modern weapon systems were bought, including two reconnaissance aircraft, four medium-range CASA CN-295 transport aircraft, four submarine-hunting helicopters, several hundred new radio stations, a large number of new radar systems, and handheld antiaircraft missiles. In addition, the Polish Armed Forces incorporated used weapons obtained for free or at a reduced price, such as 128 Leopard tanks from Germany, two missile frigates from the United States, and four Kobbenclass submarines from Norway. An important new achievement was the full automization of the air force's command system. However, several other desired modernization plans were not fulfilled, a large amount of equipment was not overhauled, material stocks were not replenished, and many necessary improvements in the social conditions of the soldiers were not executed. It should be stressed at this point that the international commitments of Poland were entirely fulfilled, with the presence of some 2,000 soldiers in various peacekeeping forces in the Balkans (Bosnia and Herzegovina, Kosovo), in the Middle East (Golan Heights and Lebanon), and in Afghanistan.

The experiences of the first Plan of Development of the Polish Armed Forces influenced its next version, mandated by the two-year cycle of NATO planning. The focus was put on the intensive modernization of the armed forces. The additional and quite forceful factors that also shaped the new plan were the Prague Capabilities Commitments PCC, adopted at the NATO Summit in 2002, and the new security environment created by the global terrorist threat, the danger of proliferation of weapons of mass destruction, and the transborder security challenges posed by the international organized crime. For the first time, the program also took into account the experiences stemming from the past involvement of the military in domestic emergency rescue operations during the flood disasters.

In sum, the new plan was concentrated on augmenting operational capabilities that would increase the ability to react quickly to military and nonmilitary threats inside and outside the national borders. The latter task incorporated the support of international peacekeeping and peace enforcement missions of NATO, EU, and the UN, as well as antiterrorist operations undertaken by these organizations. The tasks of crisis response and peacekeeping operations were to be met by the Polish Armed Forces by forming "modular" operational groups, incorporating land, air, and naval forces. The implementation of this plan envisages the readiness of one large group of some 15,000 soldiers capable of fulfilling the obligations under Article V of the Washington Treaty, or two groups of some 5,000 soldiers for high-intensity crisis-response operations, or, alternatively, two operational groups of some 2,500 soldiers for low-intensity conflict situations. These forces are to be prepared for both the NATO Response Forces and for the EU-led operations under the concept of Rapid Reaction Forces.

The new program, despite its demands on the Polish Armed Forces, had a substantially better starting point than all the previous ones. It could assume an overall relative stabilization of the main existing military structures and of the quantitative parameters of the forces. Moreover, a visible improvement of the economic situation enabled a more stable, though still moderate, financing of the military at the level of 1.95 percent of the GNP (roughly four billion dollars in 2004). The plan, covering the years 2003 through 2008, focuses on improvements in all areas critical for the military potential and the operational capabilities of the armed forces. In 2004, as many as 55 percent of the forces will be professional soldiers, with a maximum of 60 percent reached in 2008. An important change in this regard will be the introduction of a

Stefan Czmur and Lech Stefaniak, "Drugi Szescioletni (Second six-year)," Polska Zbrojna, No. 4, January 2003.

Basic Information of the MoND Budget for 2004 (Warsaw: Ministry of National Defence, 2004).

new corps of soldiers: professional privates, who will be able to function in the more demanding military disciplines. Within the command structures of the armed forces, the only major change is the creation of a Joint Operations Command. Accordingly, a substantive increase of modern weapons systems and military equipment is foreseen. In comparison to the previous year, the plan for 2004 increased the share for equipment and infrastructure by 3 percent to 16.2 percent. In concrete terms, during the early years of the new program, the Polish Land Forces will incorporate new armed fighting vehicles and new antitank missiles. The air force will receive its first batch of F-16 aircraft and will complete the integration of the CASA transport aircraft. The navy will complete its rearmament of its existing vessels with the new anti-ship missiles and the incorporation of the Kobben submarines. Alongside these technological advances, the armed forces should be ready to form mobile commands of deployed units together with the appropriate communication systems and logistical combat support systems. This ambitious program should permit one-third of the national armed forces of 150,000 soldiers to comply fully with all NATO standards and operational procedures. By 2008, the forces are to consist of some 850 tanks, 1,266 armed fighting vehicles, 980 self-propelled artillery pieces over 100 mm, some forty armed helicopters, 128 aircraft, eight medium transport aircraft, at least four long-range transport aircraft, and some forty warships.

### The Polish Armed Forces in the International Stabilization Force in Iraq

The participation of the Polish Armed Forces in the operation in Iraq and in subsequent stabilization operations is the largest overseas Polish military action of the last two decades. However, it is not the first or the most remote Polish military engagement in postwar history. During the last fifty years, Poland participated in over fifty such operations under the UN and NATO flag, as far away from home as Cambodia, Angola, Korea, and the Middle East. During the last decade, Polish units served as SFOR forces in Bosnia and Herzegovina, and as KFOR in Kosovo, in Haiti, and in operation Desert Storm in Iraq in 1991. Small Polish units of Special Forces were used in combat actions during the operation Enduring Freedom in 2003. Other units took part in de-mining and other military activities in Afghanistan. However, due to its scale and character, none of these operations have had such a profound effect on the future development of the Polish Armed Forces as its ongoing participation in Iraq's stabilization forces.

The present engagement of the armed forces in Iraq follows the resolutions of the UN Security Council No. 1441 of 8 November 2002 and No. 1483 of 22 May 2003. The Polish Military Contingent was deployed according to a decree of the Polish president on 6 June 2003, concerning the participation in the operation Iraqi Freedom within the ad hoc coalition led by the United States. The arguments for this decision were supported by the majority of Polish society: to enter the coalition would strengthen Poland's position as an active member of the international community and of NATO, would directly involve Poland in the effort to eradicate terrorism, and would provide humanitarian assistance and aid in the stabilization of Iraq. The task was extremely demanding, but its implementation would prove in a practical way the abilities of the Polish Armed Forces to participate substantially in international military structures and in leading a multinational operational unit. 161

The decision was taken in response to a request to join the coalition as a leading nation in a multinational division and to be operational within the extraordinarily short time of four months. The formation of the multinational division included several steps: from the First Force Generation conference in London in the first week of May 2003, to the Second Force Generation conference in Warsaw two weeks later, to an Orientation and Commanders meeting at the beginning of June, to the deployment of an initial reconnaissance unit in Iraq in the second week of June, various staff talks with the participating states during that month, through the several consultations within NATO SHAPE, and to the first troop deployment in the first days of July. According to NATO standards, this type of process usually takes about four years. The task was accomplished with the substantial assistance of NATO, which provided intelligence data, information management, logistical expertise, movement coordination, and secure communications equipment.

The national contingents of the division were transported by air and sea to the area of operation in two steps: first to the intermediate bases in Kuwait, to permit for the acclimatization of the troops, and later by ground transport to their final destinations.

The initial area of responsibility of the Multinational Division Central South (MND CS) covered about 80,000 square kilometres in five Iraqi provinces, with a population of about 5.1 million inhabitants (after the withdrawal of the Spanish contingent, the area was diminished by one-third). The division had an initial strength of 9,000 soldiers, of which some 2,500 were Polish, and was built of twenty-five national contingents, organized in three brigades under the Spanish, Ukrainian,

Raport: Operacja Stabilizacyjna w Iraku. Sztab Generalny WP. Generalny Zarzad Operacyjny – P3. Warszawa 2004 (Report: Stabilization Operation in Iraq. General Staff of the Polish Armed Forces. Operational Directorate – P3).

and Polish command. Within the area of responsibility also operated the U.S. Civil Affairs Brigade, two battalions of military police, two signal battalions, intelligence units, MEDEVAC units, and a number of logistics units and bases. The Polish side, with special communication modules provided by NATO, organized the divisional headquarters and divisional staffs. The U.S. forces organized a large part of the logistical support, according to a special Polish-American technical agreement signed on 22 July 2003. The MND operated under overall American command, organized as a Combined Joint Task Force-7. Thus, the division operated within a three-tier network of command and control: that is, under the CJTF-7, the Coalition Provisional Authorities, and in some specific situations, the respective national military and political authorities.

The overall mission of the division was "to conduct security and stabilization operations in order to set the conditions for Iraq to become a stable and self-governing state." More specific tasks involved the protection of administrative institutions, religious sites, and oil production wells, the monitoring and protection of state Iraqi borders, and maintaining security. The mission also consisted of "maintaining support of the Iraqi population for reform," assisting in the maintenance of order and security, restoring Iraqi law enforcement structures, providing for essential services such as health care and education, rebuilding public administration and government institutions, protecting religious pilgrimages, and revitalizing the local economy.

To implement the mission of the MND according to the norms of international law and the NATO's document MC 362/1, the participating states consulted the relevant documents during the preparatory period. Most of the national contingents adopted them in full; some created limited additional interpretations and restrictions.

As it turned out, the political and military conditions in Iraq worsened after the deployment of the MND. The mission of "stabilization" had to be widened to include more offensive military tasks such as countering terrorist activities and political groups aiming at the destabilization of the country. These tasks were carried out in form of "surgical" raids, the rounding up of insurgents, and intensive patrolling. The widening of the mission necessitated the augmentation of combat capabilities. This was achieved, in the case of the Polish units, by adding several armoured vehicles and armed helicopters delivered during the second rotation of the contingent.

To execute its basic tasks, the MND organized divisional Centres of Humanitarian Support as well as Tactical Support Teams and Administration Support Teams, composed of civilian and military specialists. Up to now, three battalions of Iraqi security forces, two battalions of the border guards, several units of perimeter guards, over 3,000 policemen, and a large number of prison guards were organized, trained, and

equipped. Several buildings, housing law enforcement officers, new criminal courts, and local administrative offices were rebuilt or overhauled and furnished. Several schools were opened and provided with the necessary supplies. Similarly, thirty-two hospitals were overhauled and equipped, and some 8,000 Iraqis were treated by the divisional health services. The division organized transportation and coordinated the supply of fuel to the civilian population, and oversaw the replacement of the old Iraqi currency. Special units of the MND helped in securing and excavating mass graves. Moreover, measures were taken by the MND to protect archaeological sites.

On the military side of the operation, the MND organized a wide network of intelligence and reconnaissance activities to provide an early warning against terrorist attacks and destabilizing activities of various political and religious groups. A special unit was responsible for the preparation of psychological operations within the Iraqi population. All thirteen camps where the units of MND were stationed were heavily protected and fortified. A great effort was put in the de-mining of large areas and in the liquidation of large stocks of explosive materials and ammunition. A serious task for the engineering units was to provide the camps with clean water. The communication within the national contingents utilized national systems, whereas the units and the divisional command used satellite communication, short- and ultra-shortwave radio communication, as well as the Polish troposphere radio-line system. The division used various teleinformation networks, including MILVAN, CENTRIX, DSN, IVSN, CRONOS, and INTERNET.

The deployment and operation of the Polish contingent in Iraq were continuously supported by the Polish and coalition's air transport activities. The bulk of manpower and a large part of the military equipment were delivered by air. Among the tasks of the Polish air transport was the maintenance of a logistical "air bridge" to home bases and the medical evacuation of the sick and wounded. Among the aircraft used by the Polish contingent were Tu-154s, An-26s, and CASA C-295s. In total, they flew some sixty times in support of the first shift of the contingent. Two quarantine centres were organized at the airfields in Babimost and Slupsk in order to contain a possible epidemic among the soldiers.

The Polish contingent of the MND operated a special Independent Air Combat Group, consisting of a squadron of armed helicopters assisted by a technical maintenance unit and ground communication unit. The tasks of the group included patrolling of ground transportation routes, the protection of ground convoys, medical evacuation and cooperation with the rapid-reaction ground groups, reconnaissance, and the demonstration of force over the MND's area of responsibility. During the first rotation of forces, the helicopters flew over 1,200 combat hours.

The structure of the MND included national units of military police, with the divisional headquarters operating a multinational company of servicemen. In the Polish case, the military gendarmerie was present during the relocation of forces, guarding bases and transporting men and materials. The main tasks were the control of discipline in, and security of, the units, the criminal and disciplinary investigations in case of a breach of law, and the protection of VIPs. Once in Iraq, however, the military police received additional tasks: to train the local police units and border guards and to cooperate with the local law enforcement personnel. Additionally, the military police protected the de-mining teams, the civilian fuel transports, and maintained surveillance over apprehended Iraqis.

It is worth noting that besides serving as a "lead nation" for the MND, the Polish Armed Forces in Iraq deployed also a unit of the navy and a unit of the Special Forces. The operations of these highly specialized units in the conditions of modern warfare and in a highly demanding climatic environment was a valuable experience for the continuing development of the Polish Armed Forces.

# Lessons Learned by the Polish Armed Forces from the Operation in Iraq<sup>162</sup>

The assistance provided to Poland by NATO and the allied nations proved to be an indispensable organizational and technical facilitating factor in the establishment and operation of the MND. Poland alone could not have lead the division and organized a fully-fledged divisional headquarters: it lacks the appropriate intelligence capabilities, the long-distance communication systems, the experience required to organize the logistical train on a multinational basis, and the large-capacity transport aircraft.

The national specialization within the MND has proven practical and effective: individual national units executed transportation, engineering support, airlift, remote air surveillance, quick reaction units, psychological operations, and civil-military activities. The role-sharing and functional specialization was proven in practice.

Among the acute difficulties stemming from the multinational character of the division was the existence of different rules of engagement for various national contingents. This phenomenon was already familiar from previous international peacekeeping operations. In demanding se-

Operacja « Iracka Wolnosc ». Materialy z konferencji naukowej. Akademia Obrony Narodowej, Warszawa 2003 (Operation "Iraqi Freedom". Proceedings of the scientific conference. National Defence Academy).

curity conditions such as those existing in Iraq, differing rules of engagement can cause serious friction during time-compressed and highly dynamic combat situations. The only way to address this deficiency is to work it out during the initial operational planning and force generation period. Various national units organically linked to a higher organizational element and remaining under joint command cannot fail to operate under the same rules of engagement.

The accomplishment of the stabilization mission depends on the ability of the foreign military forces to gain the support of the local population. This is true in all types of peacekeeping missions, but it assumes utmost importance especially under more difficult conditions, such as those existing in Iraq. To achieve this difficult objective, the soldiers must go through special training and education, gaining an understanding of a different culture and habits. The stabilization forces must devote large financial resources and possess ample medical, engineering, and logistical capabilities to be able to assist the local population in their everyday life, especially as the country was devastated by the coalition forces.

In the more specific domains, the operation in Iraq clearly showed the painful inadequacy of the Polish military air transportation assets. Without the assistance of the U.S. Air Force, the deployment of the units could not be accomplished. The experiences of the Polish air crews taking part in the air bridge between Poland and Iraq/Kuwait was particularly difficult: it turned out that in the case of such long-haul routes, the number of flying personnel available must be more numerous than when the aircraft operates within the national borders. Another observation stemming from the Iraqi operations is the need for more efficient loading equipment and for an ability to maintain and repair airfields in distant regions.

Through the involvement of the Polish military police in the MND, a number of lessons were learned: the task of training the local police and of border guards posed unforeseen problems to soldiers not possessing professional educational backgrounds, and acting as prison guards was not a task accepted as befitting soldiers. The number of military policemen was too small for the range of duties they were assigned to. It also turned out that the various national contingents of gendarmerie operated incompatible systems of communication.

The most immediate lesson on part of the helicopter units functioning in the Independent Air Combat Group was the need for special skills permitting the manoeuvring of the whole group of aircraft in a hostile environment and at night. Similarly, the tasks performed by the group required a close coordination with various ground units—not an easy task for a multinational formation.

## The Effect of the Antiterrorist Campaign on the Development of the Polish Armed Forces<sup>163</sup>

Two lessons from the antiterrorist campaign of the last few years can be learned by the national forces: the first stemming from the international experiences and incorporated through the exchanges among the allied armies, and the other stemming from individual national involvement and "digested" within the specific national organizational, financial, and technological conditions. The lessons coming from the higher order of analysis, which takes into account the lessons from the military operation of the entire coalition and especially of the leading national force, are adapted and utilized by the individual partners in their own ways, according to their experiences and capabilities.

The stabilization operation in Iraq corroborated the already well-established tenet on the effectiveness of "jointness" in action of various formations. This jointness was elevated at a higher level in comparison to earlier conflicts, due to the greater manoeuvring speed of forces, the increased tempo of operation, the higher precision and effectiveness of attack, better reconnaissance permitting a more precise choice of targets, and the most appropriate ammunitions and weapon systems for the destruction of those targets. The special forces supported the actions of land forces by securing the important crossings and bridges, and supported the air force by spotting and illuminating targets. The air force worked on behalf of the land forces and the special forces by providing the necessary information on the location and nature of the ground targets. The ship-launched missiles and aircraft were constantly ready to destroy targets indicated for destruction by any of the three other types of forces. All these activities were highly synchronized during all phases of the battle. The coordination was carried out in both the time and space of the battle. In sum, the net-centric warfare model passed its first full practical test with mostly positive grades. The command and control of the operation was still the most difficult and, sometimes, failing element of the operation. There is still much to be done in the creation of Network Enabled Capability - that is, a truly common real-time information network of all elements of forces and weapons systems.

Another general lesson of the last operation is that jointness cannot be achieved just before or during the military action; it must be established much earlier. Otherwise the expeditionary forces, which are to be at a high degree of alertness and ready for immediate action, will not be

Materialy z konferencji naukowej w Akademii Obrony Narodowej, Warszawa, 10 maj 2004 (w druku). (Proceedings of a scientific conference in the National Defence Academy, Warsaw 10 May 2004, to be published).

up to their highest standard of efficiency, according to the theoretical model of net-centric warfare.

The unprecedented strikes of a large number of missiles and aircraft at many targets, linked with the simultaneous land operation, had an enormous physical and psychological effect on the opposing forces. This form of attack broke the opponent's ability to control the state administration and the armed forces. The shock of such an operation enabled the coalition forces to avoid intensive battles in towns, which was expected and planned for by the Iraqi defence.

The precision-guided munitions again proved their effectiveness. The new modes of observation, guidance, and penetration, together with modern avionics and speed of action, permitted a precise attack on targets in all atmospheric conditions and avoided unnecessary collateral damages. In comparison to 1991, the U.S. aircraft increased the usage of PGM from 15 to 100 percent (altogether some 20,000 bombs and precision-guided missiles and some 1,000 cruise missiles were launched). The attacks were mainly directed against the land forces, the command and control infrastructure, and political command centres. Among the more successful elements of the new technology were unmanned reconnaissance air and integrated surveillance air platforms, such as the E-8C JSTARS, providing a constant penetration of the battlefield and a real damage assessment after an attack.

All these experiences and observations are being incorporated into the Polish Defense Planning and Programs of Development of the armed forces. The directions of change in the existing transformation and modernization plans are rather clear. What may disturb in their implementation, as usual, is the level of available financing. In this respect, some point to the heavy financial burden of the Iraqi operation on the Polish defense budget, as the costs of the Polish contingent are born from the official budget of the Ministry of Defence.<sup>164</sup>

The lessons from the Polish participation in the stabilization forces and thus the indication for development programs are the following:

- The command, control, and communication systems are the single most important element of future forces. For the units that are to operate far from the home base, the C3 system must be highly mobile, enabling the establishment and functioning of mobile commands at various levels of force. These commands should have highly computerized systems of calculating the optimal decisions and be able to coordinate their command processes with those of the allied forces. To prepare the future Polish contingents for international peacekeeping

Wojciech Leszczynski: Wojsko Polskie 2004. Na rowni pochylej (Polish Armed Forces 2004. On the downturn). Nowa Technika Wojskowa, no. 5, 2004: 18–25.

- or any other type of modern military operation, the communication systems will be more redundant, based often on a satellite and shortwave radio stations.
- The intention to create a new Joint Operation Command in the Polish Armed Forces is seen as very apposite, for both extraterritorial and for purely national defence operations.
- One of the more demanding aspects of command and control is the coordination of operations by Special Forces. There is need to work out a special command for such types of forces. The Polish General Staff is already working on the "concept of special forces," in which the existing units of the six Air Assault Brigades, twenty-five Air Cavalry Brigades, forty-nine Special Forces Regiments, the "GROM" unit, and other existing units of special forces might be reorganized into mobile Rapid Reaction Joint Battle groups. 165
- The contingent of the Polish forces, operating within the allied grouping of forces, must be able to communicate well not only with the subordinated national and foreign units but also with the national command. For this purpose, new communication systems multichannel satellite stations, mobile satellite terminals, shortwave radios, and data transmissions systems are to be obtained.
- Intelligence and reconnaissance services are to ensure the security of the military actions, to carry out psychological and deception activities, as well as electronic warfare. There is a high demand for intelligence data to be provided in real time to operational forces. For this purpose, new image intelligence (battlefield surveillance) and signal intelligence systems are to be introduced into operational forces in greater numbers. Existing national programs aiming at the production of new unmanned air surveillance systems are to be intensified.
- There is a need for creating "battle-space awareness" at all, even the lowest, level of operational command, through a timely integration of information coming from various sensors and information sources. To implement this, Poland is currently developing its own M-28R "Rybitwa" ground surveillance aircraft.
- There is a serious deficiency of the Polish forces in strategic and tactical airlifts not only to transport forces, but also to provide continuous logistical battle support. For this purpose, Poland has entered the European Program of Development for a large-capacity transport aircraft and plans to acquire the U.S. C-130 aircraft. To the same effect, plans exist to modernize M-28 tactical transport aircraft and to further increase the number of C-295M operational aircraft.

Hubert Krolikowski and Krystian Piatkowski: Miejsce Sil Specjalnych w systemie obronnym RP (Place of Special Forces in The Defence System of the Polish Republic), Nowa Technika Wojskowa, no. 3, 2004: 14–20.

- There is a need to augment the ability of the Polish land, air, and naval forces to use precision-guided weapon systems. The existing procurement programs concerning the new ground- and air-launched antitank missiles, as well as ship-and aircraft-launched precision-guided munitions are responding to this need.
- The Polish Air Force intends to form three tactical elements: (1) the F-16 aircraft with a refuelling capability to support allied operations;
  (2) operating the Su-22 aircraft to support land forces and the navy within the national territory; and (3) by using the Mig-29 aircraft for airspace surveillance and defence.<sup>166</sup>
- The single existing mobile and fully self-sufficient military hospital, created during Poland's participation in PfP and PARP activities, turned out to be an extremely valuable asset. There are plans to organize another such unit.
- There is a need to improve the soldier's equipment, including weapons, protection gear, and communication systems. The adaptation of the U.S. "twenty-first century warrior" concept to Polish technological and financial conditions is considered.
- The experiences of the Polish Armed Forces in the Iraqi Stabilization Forces as well as from the other peacekeeping operations indicate that contemporary armed forces must be ready for a wide spectrum of different tasks performed in various environments, from high-intensity combat to humanitarian relief activities. Accordingly, the individual soldier's system of education and training as well as the methods of preparation of the commanders must change. The educational process can no longer concentrate on one-dimensional operations, but must introduce more forcefully the idea of joint operations at a lower level of command. Also, a more comprehensive program of political, psychological, and sociological problems should complete the purely military elements of the modern officer's education.

The operation in Iraq proved to be much more demanding than expected. Though the Multinational Division under the Polish command performed primarily as a stabilizing rather that an occupying or fighting force, it was often inadvertently pulled into real battle engagements with insurgent and terrorist groups. This necessitated a change of the rules of engagement, tactics, garrisoning, force protection system, and composition of weapons fielded by the force. The worsening military conditions exposed several weaknesses of the physical protection of soldiers as well as of their training and battle readiness. It is also obvious that the deterioration of the situation in Iraq seriously impeded the abil-

Robert Rochowicz: WLOP 2004 czyli z nadziejami na kolejne lata (Air Force 2004 with Hopes for the Future). Lotnictwo, no. 3, 2004, pp. 30–33.

ity of the MND to assist Iraqi authorities and the population in post-conflict recovery. This, in turn, undermined the legitimacy of the entire operation in the eyes of Polish society, which supported the stabilization mission but is more reluctant to see the army engaged in warlike or occupation operations. These negative repercussions notwithstanding, the operation in Iraq and Afghanistan, the largest and most difficult military engagement of the Polish Armed Forces in several decades, provides strong incentives for modernization and better adaptation to the requirements of the modern battlefield.