

THE MACEDONIAN DEFENSE MARKET AND TRANSFORMATION

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SUMMARY

Macedonia's accession to the North Atlantic Treaty Organization (NATO) requires restructuring as well as modernization of the Macedonian Armed Forces in compliance with the NATO standards. Along with the outlined plan for the modernization of the Armed Forces within a timeframe that spans from 2004-2013 there is also a separate Strategic Defense Review (SDR). Its main task is to perform a thorough reassessment of the state of the armed forces and to outline the guidelines for their long-term development in conformity with the new security environment and the available defense resources.

The upgrading of the communication/information systems will be one of the main focuses of the campaign, as well as strengthening the operative capabilities of the deployable forces. The modernization of the armament/equipment of the Army, and Aviation WNG. Development of Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance Systems (C4ISR) is another priority.

For the sake of development of the structure and capabilities, defense assumptions should be adopted most urgently, which relate to operational capability, readiness, scale of effort and concurrency for operations. The development of the structure of forces and capabilities should be in accordance with the requirements and structure of forces and capabilities established in this political framework, especially the priorities, missions of defense and tasks of Macedonian army. This process is to include planning for the capabilities and training of the reserve component of the Macedonian army and the civilian defense.

By the end of 2004, strategies is adopted for the management of defense at all levels of decision making, as well as in the areas that relate to personnel (including also education of civilian experts), its professionalisation, qualifications, career with equal opportunities for all, as well as adequate ethnic representation in the Macedonian army, training and education, including the civilian personnel in the ministry of defense, interoperability, modernization and procurement, logistics, standardization, as well as development of strategies for improvement and interoperability of the intelligence capabilities and crisis management.

Besides these, in the remaining parts of the Strategy there is guidance and positions concerning certain specific areas.

Revision, changes and supplements to the Strategic Defense Review in procedure, manner, and activity as it is done now are and should be carried out every year. The changes and amendments are submitted for adoption to the Parliament of the Republic of Macedonia.

Both American and European major defense industry companies are already on the list of strategic partners of the Macedonian Ministry of Defense (MoD). Other positive developments determining their successful performance on the Macedonian market are the availability of qualified specialist to support their operations and the lack of restrictions, tariff/ non-tariff barriers in importing defense industry commodities and dual use commodities in the country.

MARKET HIGHLIGHTS AND BEST PROSPECTS

For the execution of the armament and equipment modernization strategy, the Macedonian government plans a steady defense budget within **2.1-2.4%** of the national GDP to be disbursed by 2007. The allocation of resources, and thus the planning of the structure of forces and capabilities should be conducted in such a manner that by 2007 the expenses relating to personnel, including food, clothing and similar expenses for maintenance of equipment and infrastructure should be brought down to between 65-70% of the available budget. Of this the total expenses for personnel should be around 50% of the available budget. For training and exercises, readiness, operations and operational capabilities, equipment and modernization, quality of life, research and

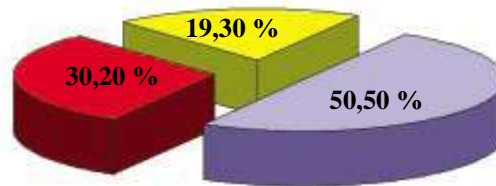
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development of equipment and infrastructure and provision of realization of the competencies of the ministry of defense the allocation should be 30-35% of the available budget and up to 1.5% for science and research.



■ Personnel expenditures; ■ Operations and maintenance; ■ Equipping

MoD Budget for 2006

At the latest by the end of this year, the assessment of the tasks of the ARM, the structure of forces and equipment and the desired capabilities should be completed. At the latest by 2004 all the activities for full implementation of the system for multi-year planning, programming and budgeting and planning for forces, funds and capabilities on a 5 and 10 year basis are completed. This should develop capacities for analysis and prioritization according to the circumstances and the environment of RM. According to this plans should be produced and implemented for procurement (by establishing standards for thorough analysis of expenses in relation to the benefits-achievements and the alternatives), equipment, personnel, interoperability, structure and capabilities, maintenance (whole life cycle), ability to regenerate forces and levels of training. In 2004 financial means started to be directed towards future forces and capabilities according to the new plans. Financing is planned on all activities related to those areas of activities, infrastructure, equipment and weapons, which according to the current and future plans are to be removed from the defense and the Macedonian army;

With the signing of the protocols in the future (we hoping during 2008) for Macedonia's accession to NATO, the issue of armament and equipment modernization and compliance with the NATO standards becomes increasingly important. A detailed plan, covering the period 2004 - 2013, was developed to achieve the main priorities of the modernization of the Armed Forces of Republic of Macedonia. An assessment of the defense industry capabilities and a joint Macedonian-American Force Modernization Study were completed in the course of the preparation of the plan.

These two studies outlined the interconnection among the national strategy, the national security concept, and the military doctrine. They served as a backbone for determining the required operational capabilities (ROC). The ROC's determine the concept vision of the capabilities that a type of service or unit should possess in order to fulfill the assigned military tasks resulting from the mission and goals of the unit per the National Military Strategy. The main ROC's are defined as follows:

- ✚ ROC .1: The creation of fully equipped, highly mobile, combat ready, sustainable, NATO interoperable units and formations for rapid deployment in multinational peace support operations.
- ✚ ROC .3: The creation of fully equipped, interoperable sustainable forces to assist civil authorities during natural or man-made disasters and to conduct humanitarian operations and actions for prevention and neutralization of terrorist threats.
- ✚ ROC.4: The creation of fully equipped, interoperable, sustainable combat ready Forces capable of executing the spectrum of national missions and tasks in peacetime and international conflict to include war.

The main projects are divided into three time periods and four main goals according to the requirements for the completion of the operational needs of the Armed Forces.

The time periods are as follows:

- ✚ Current period: 2007
- ✚ Mid-term period: 2004-2007
- ✚ Long-term period: 2008 –2013

The above-mentioned time frame and terms of references are undergoing a Strategic Defense Review (SDR). An updated program will be announced shortly after the completion of the SDR in 2004. The preparation of the SDR was called for by the need for thorough reassessment of the defense and armed forces state. The SDR sets the guidelines for their long-term development in conformity with the new security environment and the available defense resources.

Main goals (spread throughout the current timeframe):

- ✚ Modernization of the Land Force.
- ✚ Modernization of the Aviation WING

- ✚ Modernization of the logistic system.
- ✚ Development of command, control, communications, computers, intelligence, surveillance and reconnaissance systems.

Modernization of the Land Forces (LF)

The main focus of the Land Forces modernization process is the modernization of the Deployable Forces. The Deployable Forces include Peacekeeping Forces under the auspices of NATO. The key responsibility of the Deployable Forces is to react immediately and provide the Macedonian national contribution to the Multinational Peacekeeping forces for Southeast Europe (MPFSEE).

Three categories of modernization are emphasized within the framework of these formations:

- ✚ Reorganization of headquarters on all levels.
- ✚ Upgrade of technology: This includes mainly communication and information systems for command and control FICIS (Filed Integrated Communications Information System).
- ✚ Education: The education of these formations will be based on Western staff procedures and skills. Priorities include deciphering NATO maps and radio/telephone procedures, understanding the basic objectives of the NATO supported mission, and acquiring of English fluency.

Modernization of the Aviation WING

The main priority for the Air Force modernization is the heightening of the operative capabilities. The goal is to achieve operative compatibility with NATO. This includes:

- ✚ Modernization of the deployable forces intended to participate in the joint operations under the auspice of NATO. The deployable forces consist of 1 aviation WING (Mi-17s, Mi8s, UH-40 and Mi-24s).
- ✚ Modernization of the Mi-17s, and Mi-24s
- ✚ Modernization of the communication/information systems and navigation systems at airports (ASOC – Air Surveillance Operational Center).

Development of the Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance Systems (C4ISR)

- ✚ Development of policy and strategy towards building C4I systems.
- ✚ Development of information systems for security types in the MoD and Macedonian Army (MA).
- ✚ Development of information systems for the MoD, General Staff, and Aviation wing's administrations as well as for the archive modernization.
- ✚ Development of an automated information system for the Macedonian Army (MA).
- ✚ Development of the automated system for human resource management.
- ✚ Development of an information system "Logistics".
- ✚ Development of an information system for planning, programming and budgeting.
- ✚ Development of internet information sites for the MA.

Modernization of the Logistic System

The main priority for the modernization of the Logistic System is to achieve the NATO standards of conserving and supplying POL on the basis of single fuel at location of warfare.

COMPETITIVE ANALYSIS

1. Bodies and their functions in the MoD/General Staff that are managing R&D/innovation process

Bodies in the MoD/General Staff which are managing R&D/innovation process are The Military academy and Section for R&D of the production of weapons and military equipment in the frame of the Sector for Logistic in the MoD

The Military academy "General Mihailo Apostolski"

– *Status*

The Military Academy of the Republic of Macedonia was established by Law which is in accordance with the Law on Higher Education and The Law on Research Work in the Republic of Macedonia. The Military Academy was verified by the Ministry of Education and Science as tertiary level educational and research institution, which gives it the same status as other faculties and makes it part of the educational system of the Republic of Macedonia. The degrees issued by the Military Academy are valid in the country and they give officers an equal education status as other graduates from civilian universities.

– *Mission*

The Military Academy is the only tertiary-level military educational institution in the Republic of Macedonia. Its main task is to educate, train and provide further development for officer personnel for ARM, and to engage them in research in the field of defense in accordance with the law.

The scientific and research work

The scientific and research work at the Military Academy is organized and carried out within the scientific - educational disciplines that are taught at the Academy in accordance with the annual and long-term scientific research programmes.

The scientific and research work is essential for the improvement of education and teachers' professional development.

The teaching staff of the Academy, the associates and a certain number of cadets who are particularly talented and motivated in their fields participate in scientific research projects.

The Military Academy is engaged in research projects for its own needs, for the needs of the Ministry of Defense, the General Staff of the Army and others. The scientific and research work is carried out in the following fields: military history, military strategy and tactics, military geography and topography; logistics; ballistics; computer science, operational research and other technical and military fields. Master's and Doctoral theses written by the teaching staff and associate staff are also considered as research projects of the Academy.

Section for R&D of the production of weapons and military equipment in the frame of the Sector for Logistic in the MoD.

Its function is: informative support to the leading authorities in the MoD in the creating of the policy for equipping of the MoD by weapon and military equipment from the domestic industrial resources, cooperation with the Sector for Special Production in the Ministry of Economy by overseeing the situation of the domestic industrial capacities and preparation of the relevant legal documents, preparing the regular analyses for technical – technological capacities and regular analyses for the personal management capacities of the production subjects that are dealing with R&D of the production of weapons and military equipment

SDR 2 Phase, 2004. The R&D issue is only generally considered within the 5th part of the SDR - Equipment and Modernization Plan .

2. Domestic Production and Privatization

In order to implement the ambitious reform objectives, the Ministry of defense has introduced a modern defense planning and management system that will ensure continuous force development and efficiency in the use of the taxpayer's money. In that direction, the high priority has been and will be the continuing of the implementation and improvement of a multi-year planning, programming, budgeting and execution system, providing appropriate development of strategy and forces with optimal use of the budget.

According to the Production and Turnover of Armament and Military Equipment Law (published on 15 July, 2002), articles 9 and 10, D & R of new armament and military equipment technologies is committed under the base of a D & R program which is adopted by the Government of the R Macedonia on the proposal by the Ministry of Economy in cooperation with the Ministries of Defense and Interior. The D & R of the new armament and military equipment can be committed by public science institutions, enterprises producing armament and military equipment and other science institutions that are dealing with science – research activities, in accordance to the existing laws. The program is financed from the budget of the R of Macedonia. The Ministry of Defense doesn't possess science – research and producing capacities. Therefore the Ministry of Defense for its own needs is contracting products and services with the factories that are part of the Economy system, eligible and verified for this purpose. Within the Ministry of Economy exists a Sector for Special Production that is the pillar body for coordination of R & D activities. In the budget of MoD/Sector for Logistic – Section for R & D of the weapons and military equipment is planned an amount of 50 000 euros per year for R & D. The R & D issue is only generally considered within the 5th part of the SDR – Equipment and Modernization Plan.

The Republic of Macedonia is not “giant” manufacturer of armament and military equipment and therefore the Republic of Macedonia is not a big exporter of defense technologies. There are only two factories producing some military equipment and armament (“Suvenir” – producing munitions and repair of small weapons and “Eurocomposit”- producing equipment for personal protection as helmets and bulletproof personal equipment) and one factory for repairing and maintenance of the military equipment and armament factory - “MZT Specijalni vozila” (factory that repairs the artillery armament and light combat vehicles). At the beginning of 2005 the factory “Suvenir” was bought by “Olympicos Industry”. The restarting of the production is expected followed by extending of the small ammunition production program- appropriate to NATO standards. In the next period the factory “Eurocomposit” should be sold and its privatization is to be expected in the near future. According the factual situation there is no strict and designed concept for defense industry transformation.

According to the SDR (April 2004) the Macedonian defense industry will maintain expertise in the following production areas:

- ✚ Ammunitions and parts for light armaments (pistols, light machine guns, submachine guns, howitzer), towed and anti-armored systems, modifications on armored vehicles, and military electronic equipment.
- ✚ Dual use articles and commodities such as radio equipment, communication systems, radars, optic mechanical and optic electronic devices.
- ✚ Military apparel, protection devices, tents, gas masks, etc.
- ✚ Defense products' overhaul, maintenance devices, and spare parts.

The involvement of the domestic industry will be encouraged wherever there is an economic rationale for that. Equipping from external sources needs to be connected to the compensation requirement (offset programs) wherever there is an economic rationale and legal possibility.

The modernization and procurement of new equipment is one of the most important thing for the new capabilities and capacities of the Macedonian army. The equipment must fit the desired capabilities and capacities of the Macedonian army, to be NATO compatible and to provide for unification and standardization and to be procured transparently and in accordance with the budget projections given in this Strategy.

The equipment plans should be based exclusively on our budget funds. Should the allies and the partners help us speedier achievement of the desired level of equipment will be possible. The equipment should be carried out in accordance with the priorities and dynamics, which provide primarily equipment of the declared units by 2007, then the special forces unit and the remaining of the Macedonian army for which the equipment process will last until 2013. In this, it is very important to stop immediately the funding of the equipment which is rear marked for disposal.

Defense Acquisition System Policy, December 2005. The implementation of the Policy implementation will be regulated with Acquisition Rulebook and Instructions for certain functional areas in acquisition. This policy formulates vision for the method of ensuring the materiel needs in defense, defines the basic principles and guidelines in the area of equipping and procurement of material and services, establishes basis for definition of procedures and methodologies for Defense Acquisition System (DAS) of the Ministry of Defense (MoD),

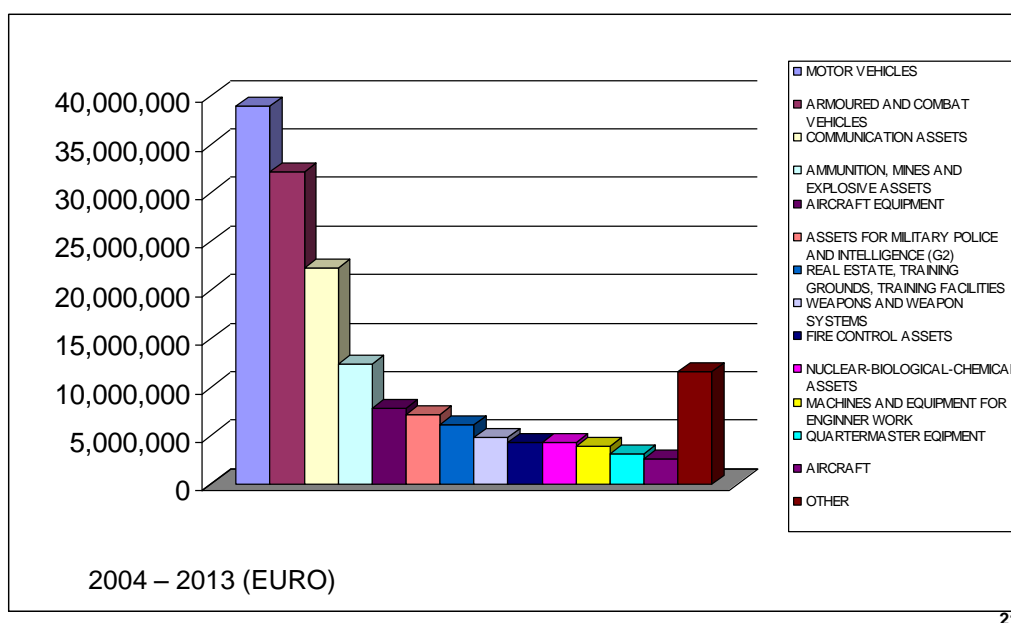
provides latitude for inclusion of the domestic economy in the acquisition process thus assuring more stable support to the equipment and technology transfer in the future and promotes cooperation with allied countries and organizations in the field of cooperative logistics.

- Regulation (instruction manual) for acquisition of the materials (equipment – armament and military equipment, material – munitions, spare parts and small inventory) for the needs of the defense system of Republic of Macedonia , 2006 . This document formulates the multidisciplinary system of measures, postulates and procedures that are to be planed and performed by the responsible subjects and bodies in the MoD within the process of the defense system material acquirement .

The detailed and individual plans and programmes which refer to equipment with all details contained in the elaborated documents of the second stage of the SDR, are adopted by the end of 2004 by the President of the Republic of Macedonia in the capacity of Supreme Commander, and the Minister of Defense.

The total survey of equipment procurement is defined, which is the result of the detailed document of the second stage of the SDR by categories of equipment and values expressed in euros, as follows.

**Equipment that is to be procured for ARM purposes in the period
2004-2013**



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The privatization process of the defense sector is being conducted by the Macedonian Privatization Agency in association with the Ministry of Economy and the Ministry of Defense. Working groups of experts are assigned to each specific privatization project. Some of the main companies from the defense sector that are being prepared for privatization at this point of time are: “Samokov”-Makedonski Brod and “Eurokompozit”-Prilep.

3. Third Country Imports

The MoD will use an integrated management structure in the Defense Acquisition System characterized by clearly defined roles and responsibilities, lines of responsibility, authority and accountability. The Republic of Macedonia will be the immediate responsible decision maker for the acquisition process. The MoD will provide a highly skilled personnel in management, technical and business disciplines. To ensure this the MoD will establish education, training, and experience standards for each acquisition position based on the level of complexity of duties carried out in that position.

The MoD has cooperation with the global defense electronics company ELBIT systems from Israel. Is purchased equipment for night vision for helicopters and is negotiating for other similar equipment for Aviation WING, ASOC, UAV (Unmanned Air Vehicles). There is possibility for investment in Macedonia by this company.

The major European defense industry companies (such as Asalsan - Turkey, Crypto age – Switzerland, EADS, Siemens) are active on the Macedonian market. Together with the major US defense industry companies they are included in the list of strategic partners of the Ministry of Defense.

4. U.S. Market Position and Share

U.S. defense firms such as Johnson Controls, Lockheed Martin, Raytheon, General Dynamics, Avaya, Motorola and Harris are well presented on the Macedonian market. Some of them have signed framework memorandums with the Macedonian Ministry of Defense for cooperation, exchange of information, establishment of working groups, strategic partnering arrangements, etc.

Furthermore, American IT firms such as Lucent Technologies, Cisco Systems, Oracle, IBM, Hewlett Packard, and Dell are playing active roles in lobbying for U.S. defense sector firms.

MARKET ACCESS

The Macedonian Public Procurement Act contains a clause that enables the Government of Macedonia to bypass the normal public tender process for major acquisitions deemed to be of a critical and strategic nature. Essentially is enabled the Ministry of Defense to select a preferred vendor and to negotiate with them directly.

1. Import Climate

There are no restrictions, tariff, and non-tariff barriers on importing defense industry commodities. The defense industry commodities are subject to duty free import regime regardless of the country of origin. Their trade is stimulated by the Law on the Control of Foreign Trade Activity in Arms and Dual-Use Commodities and Technologies.

One exception is applied to exports of dual use commodities from Macedonia. These commodities and the export firms are subject to licensing by the Ministry of Economy through the interagency state commission consisting of representatives of the Ministry of Economy, Ministry of Defense, Ministry of Interior, and Ministry of Foreign Affairs.

With the introduction and progress of the offset operations concerning the defense industry cooperation it is expected that the Macedonian government may consider introduction of other import benefits. These benefits include:

- ✚ Exemption from VAT for investment equipment, weapons, and special products that are imported by foreign investors, importers, and local partners. A value added tax (VAT) of 18 % is currently assessed at the time of customs clearance on all imports of defense sector products and commodities.
- ✚ Application of relieves in the regulation for the classified information in order to relief the investments in the defense industry.

2. Distribution/Business Practices

The suppliers of defense sector and dual use equipment should consider the long-term development of the defense market in Macedonia and armed forces restructuring reform process in general. Practice has shown that successful distribution of defense sector equipment in Macedonia is done through a representative agent or distributor, preferably someone with extensive experience, good knowledge of the market/ defense sector, and contacts within the Ministry of Defense. Another prerequisite is good understanding of the licensing procedures as far as dual use commodities are concerned.

A positive booster for the defense sector market development in Macedonia is the available human resources. There are many young military specialists who are familiar with the latest high-tech developments. Also, there are laid off military officers undergoing prequalification programs as part of the overall armed forces modernization program.

3. Financing

The financial sources for modernization of the armed forces will be allocated from:

- ✚ The Ministry of Defense budget
- ✚ The National budget
- ✚ Financial resources from international cooperation programs such as Partnership for Peace Trust Fund – CNAD (Conference of National Armaments Directors), NAMSA (NATO Maintenance and Supply Agency), RTO (Research and Technology Organization, NATO Science Committee, EU-WEAG (Western European Armaments Group), other regional organizations (OCCAR, LOI, etc.), bilateral cooperation, and regional cooperation in South Eastern Europe.

Indirect subsidy through implementation of energy-saving heating sources – installation of gas-transfer lines to reduce the current expenditures for electric power, fuel, and coal.

Sale of excess military infrastructure and partial allocation of the funds for infrastructure modernization.

4. Useful web sites

Ministry of Defense: www.morm.gov.mk

Ministry of Economy: www.economy.gov.mk

Macedonian Government: www.vlada.mk ; www.investinmacedonia.com

11 Oktomvri-Eurokompozit: www.eurokompozit.com.mk

Brako Veles: www.brako.com.mk

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