Volume 09 Number 08 – Wednesday, 22 February 2017

Part I: Slovak Republic

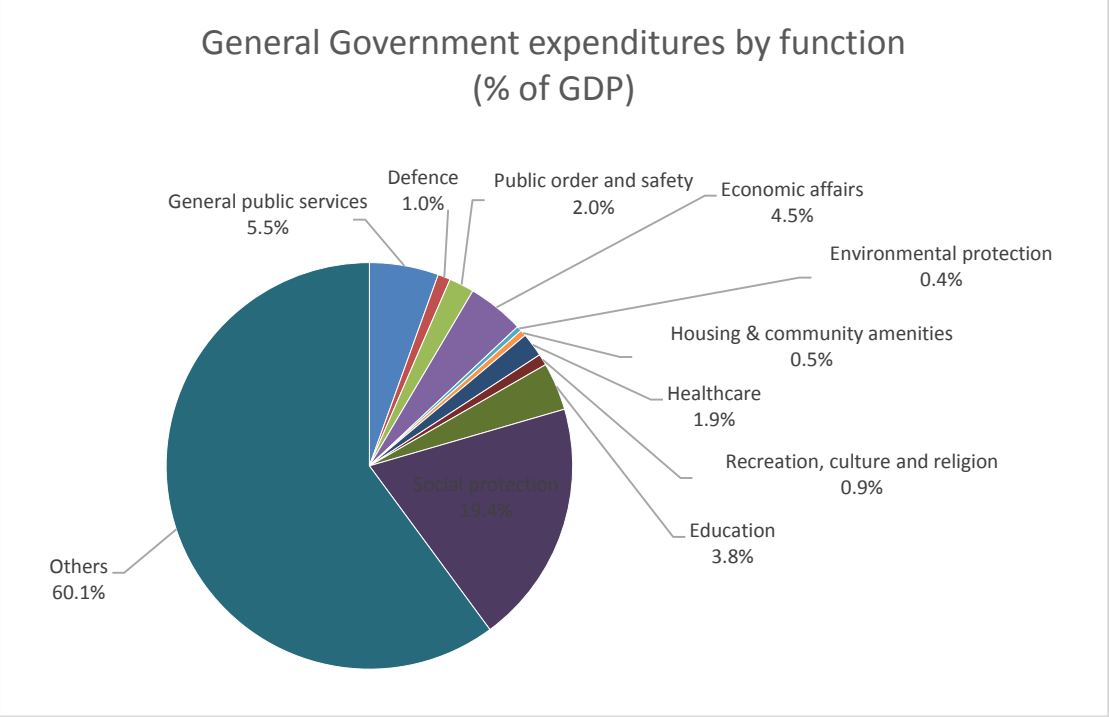
Part II: Epicos Newsroom

Slovak Republic: Defence Budget and Doctrine

The Ministry of Defence of the Slovak Republic, is the central body of state administration that guarantees the security of the country and its citizens, co-ordinates the activities of the central bodies of the state administration and institutions, as well as controls the 'inviolability' of the Slovak airspace, while managing military facilities. The Slovak Armed Forces consist of the Land Forces and the Air Force.

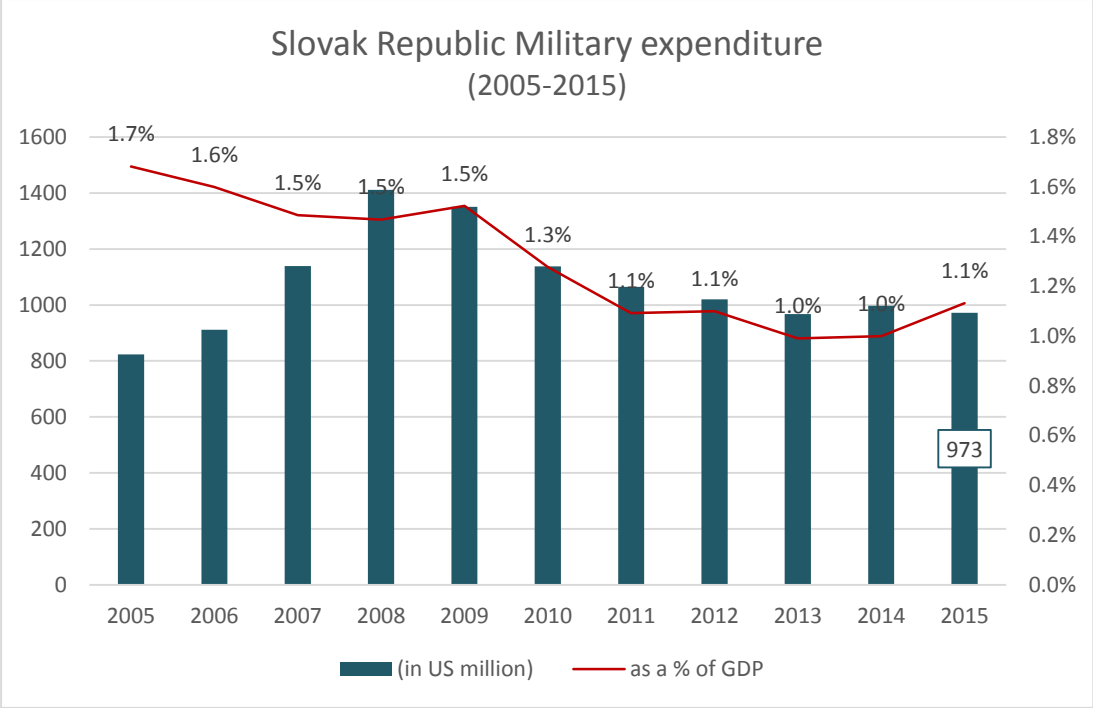
Having as their main goal the preservation of security of the Slovak citizens and the defence of the nation, they actively participate in international missions towards the promotion of peace and stability in the world, the prevention of conflicts, as well as addressing crisis situations according to the international law. Through a preventive policy, the Slovak Armed Forces secure the Slovak Republic's interests, which include the deterrence of armed conflicts within the country's territory.

The general government budget for 2016, reflected a slight decrease in the allocation for "Defence" purposes, as a percentage of GDP, to 1%.



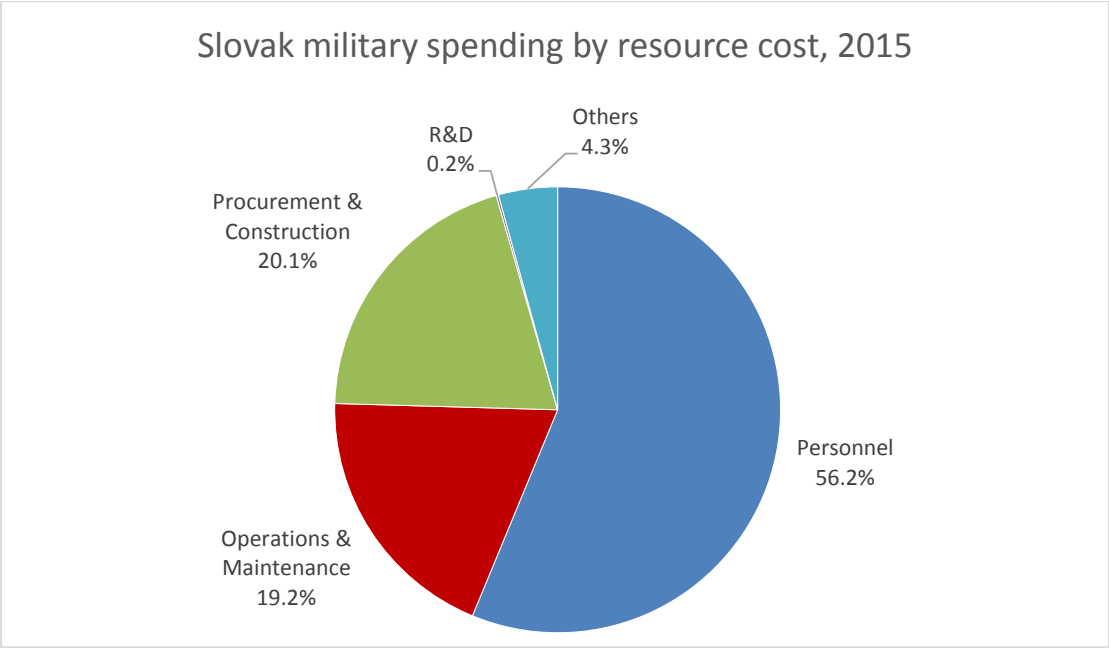
Source: http://www.finance.gov.sk/

When considering the evolution of the Slovak Defence budget over the previous decade (2005-2015), there are some slight year-on-year fluctuations (as a percentage of the GDP), (see chart below).



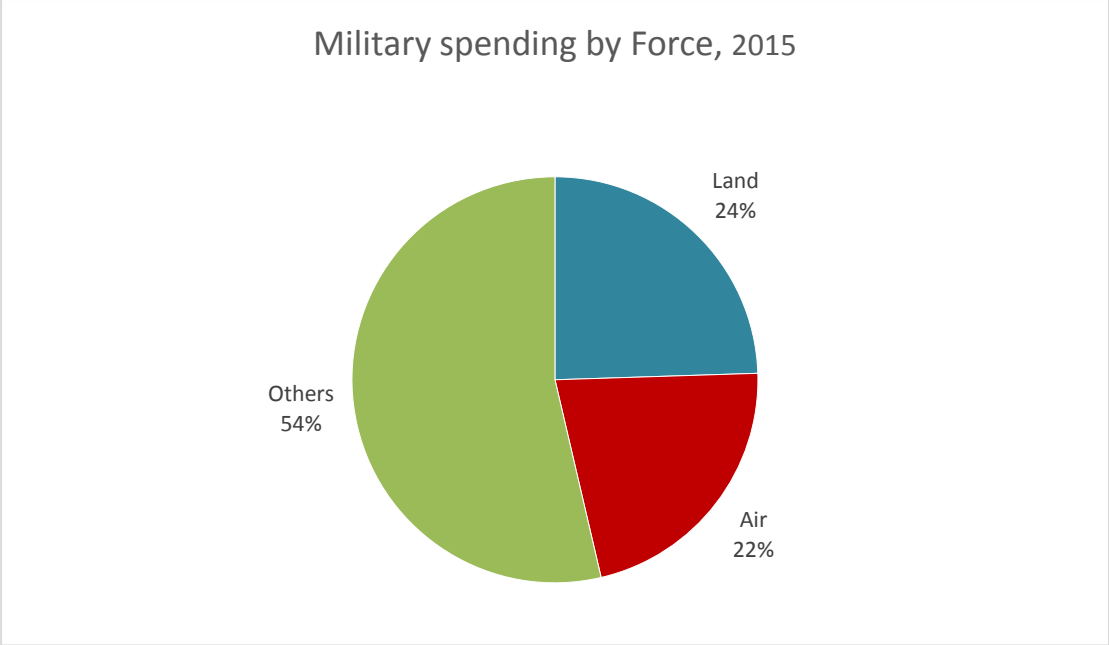
Source: https://www.sipri.org/databases/milex

In 2015, the Slovak military spending, was attributed by 56.2% to Personnel, 20.1% to Procurement & Construction and 19.2% to Operations & Maintenance, with other spending directions receiving much smaller percentages of the available budget.



Source: http://www.un-arm.org/

In another division, in relation to the type of Force, military spending was mainly directed to administrative and supporting functions (included as "Others" below), followed by the Slovak Land Forces (24%) and the Air Force (22%), (see chart below).



Source: http://www.un-arm.org/

In the last ten years, the Slovak Republic's arms procurements included Aircraft (US $15 million), Missiles (US $13 million) and Armoured vehicles (US $2 million), (see chart below).

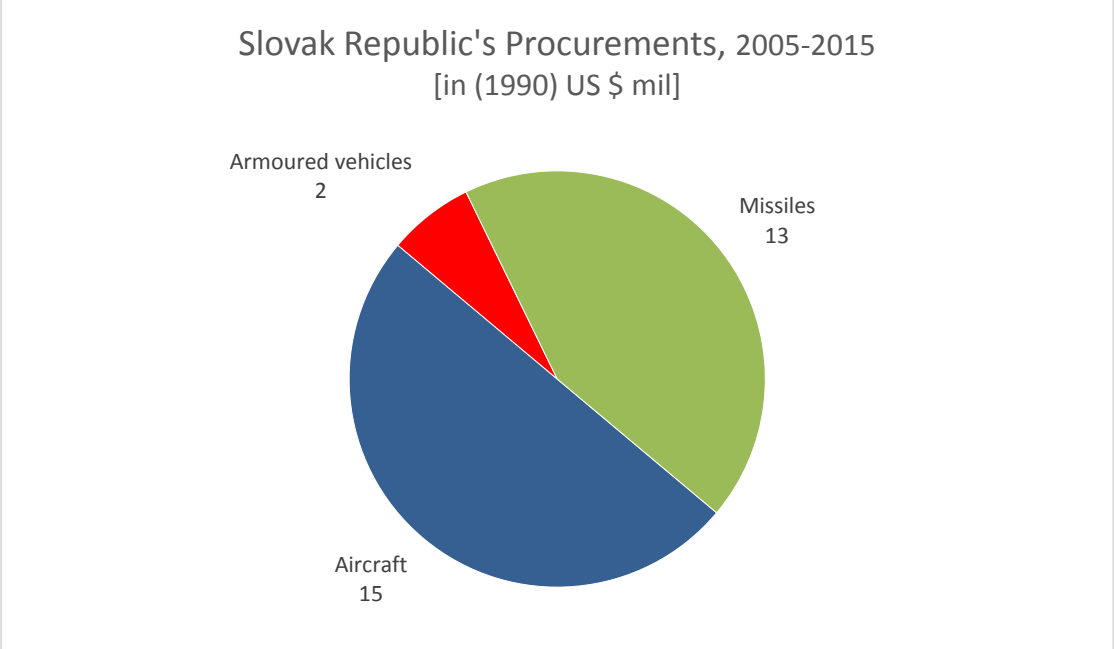
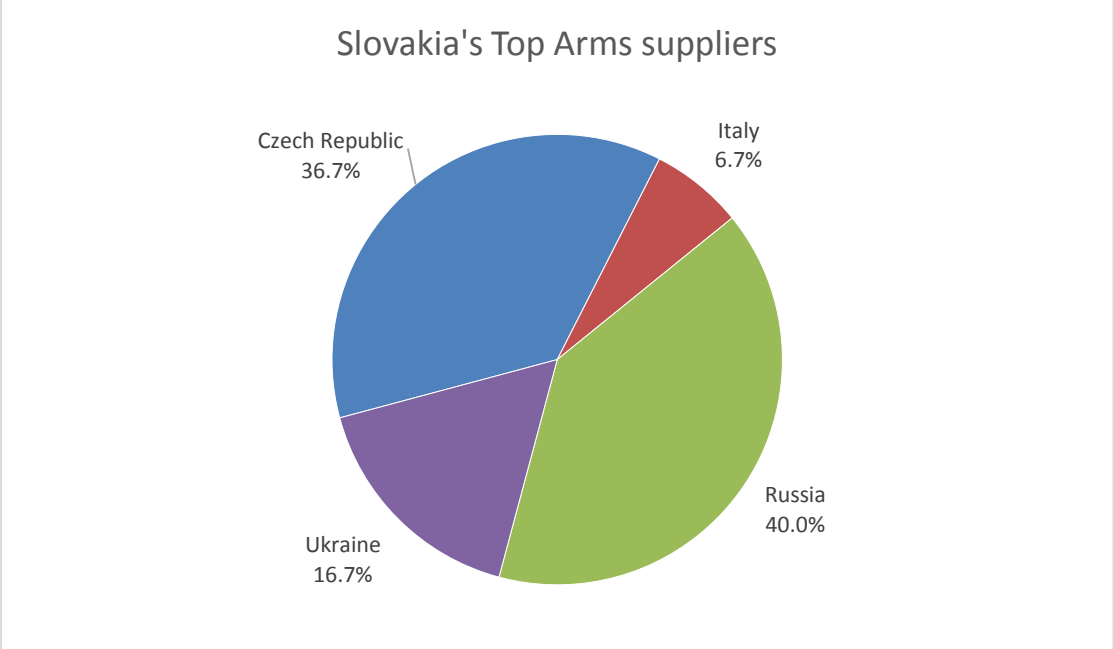


Chart: http://armstrade.sipri.org/

The Arms suppliers to Slovakia during the same period (2005-2015), included Russia (40%), the Czech Republic (36.7 %), Ukraine (16.7%) and Italy (6.7%), (See chart below).



Source: http://armstrade.sipri.org/

In 2016, the nation's defence spending towards the modernization of the Armed Forces equipment and facilities was projected to be increased to some 19% of the total defence budget. The latter, is the result of successive increases of the procurement/modernisation expenditure, as only 8% was allocated in this direction in 2008 and 16% in 2013. Thanks to this progressive increase the country managed to kick off some of the largest modernization projects in the history of the country's armed forces, such as the purchase of Black Hawk multi-purpose helicopters (9 units) and the Spartan aircraft (two aircraft have been ordered).

It cannot be omitted to mention the positive side effects of these acquisitions, including the potential establishment of a Black Hawk simulation centre in the Slovak territory, as an industrial cooperation project.

Ongoing negotiations indicate the potential acquisition of 8x8 and 4x4 vehicles, the probable upgrade of existing BVP tracked vehicles, as well as the procurement of new 3D radar systems. Projected future procurements also include the purchase of attack helicopters, combat aircraft (with the lease of the Gripen aircraft likely to fall through) and air defence systems (expectations are for the replacement of the Kub and Igla systems and the upgrade or replacement of the S-300 system).

However, all the aforementioned procurement plans, depend on the government's ability to increase the defence budget or provide further funds, beyond the allocated budget. The Slovak Republic could take advantage of this increased spending momentum in order to expand its small but specialised defence industry further, making use of related industrial cooperation and/or offset opportunities.

According to the White Paper on Defence (2016), the Slovak Republic Defence aims towards the gradual strengthening of the defence capability of the country (including in terms of

cyber security systems), the enhancement of the Slovak contribution to the collective defence and the accomplishment of Slovak international commitments in the area of defence, including the harmonisation of its defence policy according to the Euro-Atlantic orientation memberships (in NATO, EU and V4 (Visegrad Four, or V4, an alliance of four Central European states; the Czech Republic, Hungary, Poland and Slovakia)). Within this context, while taking into consideration at the same time the economic reality, a dynamic development towards the progressive modification of the main types of the weaponry and techniques has been predicted for 2016 onwards.

Slovak Republic: Defence Industry

Under the communist regime, Czechoslovakia was one of the main arms producers in the Soviet bloc, and a major supplier of arms to third world countries. After the dissolution of Czechoslovakia, the aviation and electronics sectors, as well as armament production capabilities were left to the Czech Republic, while Slovakia struggled to develop a strong customer base in the A&D sector.

However, today the Slovakian aerospace industry has a notable portfolio of products and capabilities, such as engineering design and product development of the brightest LED lights in the aerospace industry, advanced biometric security access solutions and flight control equipment, including the DigitalFlightDeck, the world's first touch OLED (Organic Light-Emitting Diode) screen complete avionics suite, as well as the world's first smart plane, the AveoPhantom.

In terms of Defence, many Slovak companies have developed within the field, contributing significantly to the employment of the country.

Today, the Slovak Aerospace & Defence Industry, has a significant position among the key industrial sites in Eastern Europe (including Poland, Romania and Czech Republic).

The Slovak Aerospace & Defence industry has a large potential. Today, the sector focuses on the design, development and manufacture of ammunition and artillery systems, mine-clearing equipment, as well as the development and manufacture of light and ultra-light aircraft and engine components for aircraft engines.

Nowadays, many Slovak private and state-owned companies, have developed their activities in the defence sector, either in the MRO areas or operating as subcontractors in international cooperation programs. Most of the sector's companies, are members of the Security and Defence industry Association (ZBOP), established in 2000, with principal mission the promotion of the domestic manufacturing capabilities, and the development of a solid national technological and industrial base, to constitute one of the pillars of the national defence.

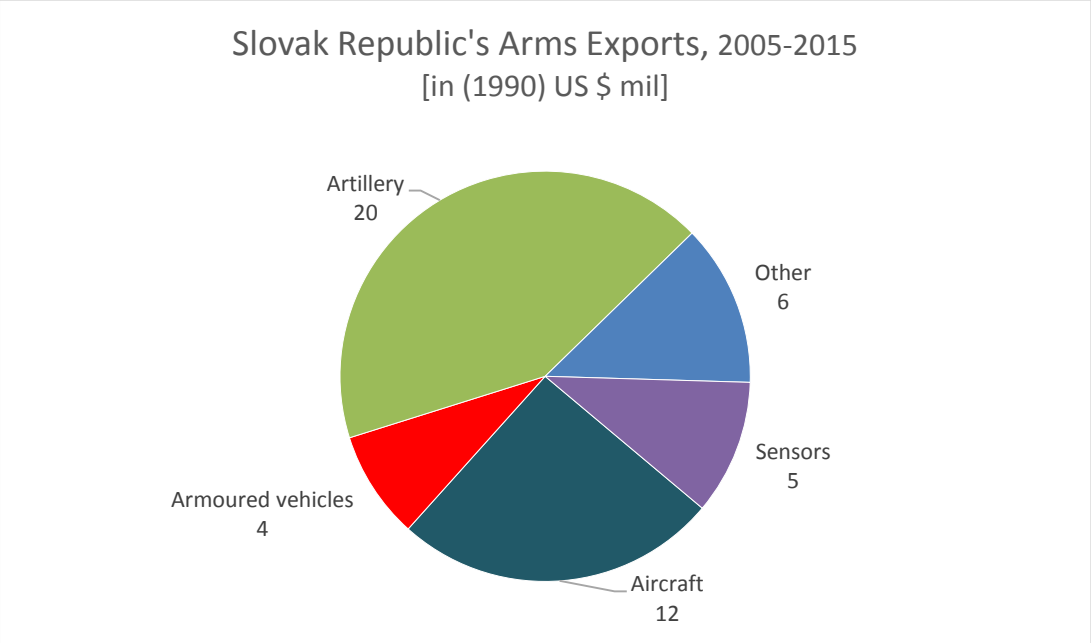
The biggest Slovakian company in the field, is the private-owned MSM Group; employing about 1,200 people, the company specialises in ammunition production and explosive ordnance disposal (EOD), the repair of military air traffic and air defence control systems, remote control systems and meteorological equipment, in addition to the production of rifles and handguns, as well as the repair of wheeled and tracked military vehicles. Other significant private companies, are Way Industries (specialised in the production of turrets, MRO of military vehicles and known for its BOZENA mine clearing systems), and Virtual Reality Media – VRM (specialised in simulators production for several types of aerial and land platforms).

Significant part of the Slovak defence production is concentrated in the state-owned DMD Holding Group, which was established in 1995. DMD Holding comprises of the following arms producing firms:

1. ZTS – ŠPECIÁL: mainly specialised in the production of artillery systems, howitzers, rocket launchers, mortars, medium and light combat turrets (turret system DVK-30) and gun barrels (30 to 155 mm).
2. KONŠTRUKTA (part of the NATO Alliance Ground Surveillance (AGS) program): operating as an artillery system design house.
3. ZVS Holding: focusing on the development, production and sale in the areas of mechanical engineering, electronics and ammunition.

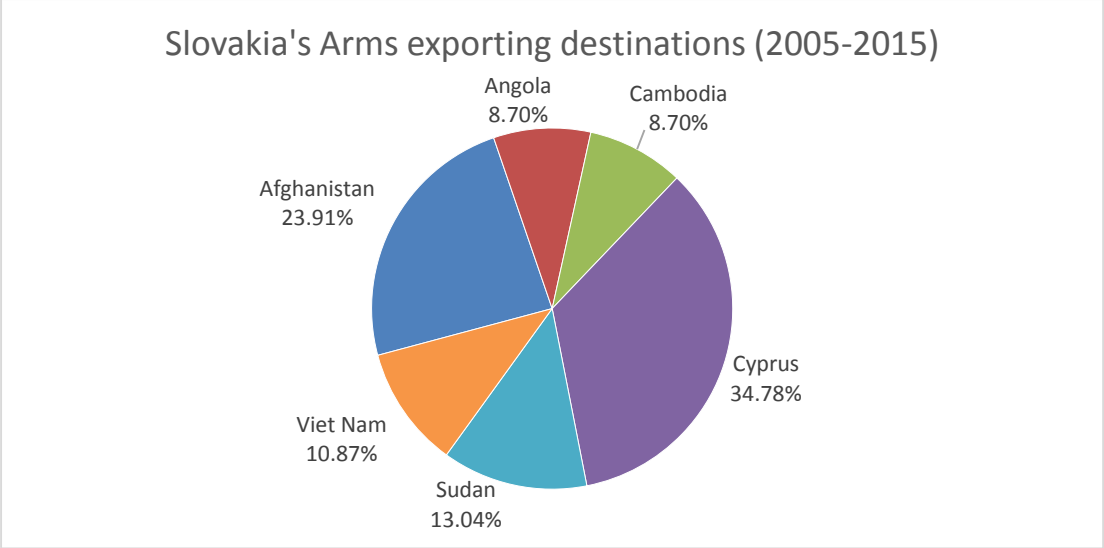
Other important companies are the private Willing (providing modernisation services for the MIG29s, engineering and MRO for various aircraft), SMS (repair, modernisation and maintenance, training, documentation & logistic support services in relation to military platforms and equipment, including Mi17 helicopters), Kerametal (production of armoured vehicles such as the ALIGATOR, TATRAPAN and ZUZANA) and the state-owned LOTN (recently awarded an up to €110 million contract by NATO (NSPA), for the maintenance and overall support of up to 40 Mi-17 transport helicopters in service with the Afghan National Army).

During the last 10 years (2005-2015), the Slovak Republic has exported a total of US $47 million of defence equipment, including Artillery, Aircraft, Sensors and Armoured vehicles.



Source: http://armstrade.sipri.org/

According to the SIPRI database, the main export destinations for this equipment included Cyprus, Afghanistan, Sudan and Vietnam (see chart below).



Source: **http://armstrade.sipri.org/**

Being well aware of its position in the European Defence Market as a smaller player, as well as the technological and industrial trends in the sector, Slovakia aims to excel in several niche areas, including simulation systems, R&D, production of ammunition and MRO and upgrading of outdated armoured vehicles. In this direction, the new types of acquired defence equipment and the possible associated transfer of technologies, could lead to further development of this sector that will 'feed' the Slovak economy, through the provision of new business opportunities and associated jobs.

Epicos "Industrial Cooperation and Offset Projects"

Epicos "Industrial Cooperation and Offset Projects" provides a unique set of online tools enabling the structure, identification and implementation of comprehensive Offsets programs, through a searchable database. By introducing different offset projects and ideas proposed by local A&D industry it ensures the optimum cost for Prime Contractors and reassures that the priorities of local industry are fully met…

For Further Information Press Here

Design and development of jigs and special tools for the Aerospace/Defence and automotive industry

A company specialized in tooling, engineering and measurement solutions for the aerospace/defence and automotive industries, is proposing, in the frame of an offset program, the partnership with a Prime contractor or lower tier company, for the design and development of jigs and special tools for the Aerospace/Defence (A&D) and automotive industries.

For Further Information Contact our ICO Department

Mail at: a-kintis@epicos.com

Synthetic Flight Training Device for helicopter and fixed-wing pilots' entry level and advanced training (non-combat)

A company constituting the first civil avionics and simulator manufacturer in its country, is proposing collaboration with a Prime Contractor or a third party in a targeted country, for the development and installation of a helicopter or fixed-wing simulator, to serve civilian and military helicopter pilots' entry level (VFR) and advanced (IFR) training needs. The project can be implemented either as a standalone project, or integrated within a major acquisition package.

For Further Information Contact our ICO Department
Mail at: a-kintis@epicos.com

News from our A&D Business Network

MBDA Awarded Additional Marte Anti-Ship Missile Contract by UAE

MBDA has been awarded a contract by the UAE Navy to supply additional Marte MK2/N anti-ship missiles. This is a follow on to the contract signed in February 2009 for the supply of Marte missiles. Each high speed multi-role combat vessel will be equipped with four box launchers for MBDA Marte Mk 2/N guided missiles, able to strike targets at ranges in excess of 30 km, flying a fire-and-forget sea-skimming profile using midcourse inertial guidance and active radar homing.

Antoine Bouvier, CEO of MBDA, commented: "I am delighted that the UAE has confirmed the trust placed in MBDA for its defence requirements. MBDA is one of the country's leading defence suppliers and will continue to show our long-standing commitment and support for the UAE Armed Forces."

Pasquale Di Bartolomeo, MBDA's Executive Group Director Strategy and Managing Director of MBDA Italia, said: "This new contract reaffirms MBDA pre-eminence in the anti-ship sector and it is a clear proof of the technology leadership of the Marte missile family that, over the years, has continued to be competitive and able to respond to increasing customer requirements, thanks to its modular design."

For Further Information Click Here

Lufthansa Technik and MTU Aero Engines agree on concluding a joint maintenance company

Lufthansa Technik and MTU Aero Engines are planning to set up a joint venture company for the maintenance, repair and overhaul (MRO) of geared turbofan (GTF) engines, with each of the partners holding a 50-percent stake. An agreement to this effect was signed by the two companies in Berlin on February 20, after the feasibility of such a joint venture had been examined over the past few months. Subject to different approvals (e.g. by the relevant antitrust authorities) both parties act on the assumption of the joint ven-ture foundation within the second half of 2017.

According to the plans, the new facility will be up and running by 2020 and have a workforce of over 500 employees. By 2020, a total amount of around 150 million euros will be invested into the new location. In terms of annual capacity, the facility will be designed to accommo-date over 300 shop visits of PW1000G-family GTF engines for the Airbus A320neo family of jetliners and other aircraft. The search for a globally competitive location in or outside Europe will be completed within a few months' time.

Dr. Johannes Bussmann, Chairman of the Executive Board of Lufthansa Technik AG, said: "We are pleased to have found a strong partner in MTU with whom we can steer our joint company to success. For Lufthansa Technik, this move marks another important step in strengthening and expanding its partnerships with reputable engine manufacturers."

Michael Schreyögg, Chief Program Officer of MTU Aero Engines AG, commented: "With the new joint venture, MTU is continuing its successful partnership strategy. Lufthansa Technik is the ideal partner for us in this endeavor. By setting up a joint facility, capital investments can be shared and opportunities for synergy and scale generated for both companies. Our objec-tive is to build the most efficient MRO shop for GTF engines around." Lufthansa Technik has been maintaining various Pratt & Whitney engine types for decades. Back in July 2016, Lufthansa Technik became a member of the aftersales service network for the U.S. company's GTF engines. The network offers the whole range of MRO services for PW1000G engines. This additional business has no impact on the workloads at Lufthansa Technik's existing locations.

MTU Aero Engines is a partner of Pratt & Whitney in the PW1000G programs; the engines have been selected as the propulsion systems for new aircraft programs launched by five dif-ferent aircraft manufacturers. To date, airlines around the world have ordered more than 8,000 of the engines incorporating geared turbofan technology to modernize their fleets. Over the coming decade, the high-volume engine program will contribute substantially to MTU Maintenance's revenues. Thanks to MTU's broad engine portfolio of other engines, its existing facilities will have a sufficient workload also in the years to come.

Lufthansa Technik and MTU have been partnering in a successful, 50-50 joint venture in Malaysia since 2003. Airfoil Services Sdn. Bhd. (ASSB) near Kuala Lumpur specializes in the repair of low-pressure turbine and high-pressure compressor airfoils.

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Epicos NewsRoom

Lockheed Martin Awarded $150 Million to Continue Production of Target Sight System for U.S. Marine Corps

The Naval Surface Warfare Center (NSWC), Crane Division, has awarded Lockheed Martin $150 million in follow-on production contracts to provide the U.S. Marine Corps with the Target Sight System (TSS) for the AH-1Z "Viper" attack helicopter.

Under the contracts, Lockheed Martin will produce TSS Lot 13 and Lot 14. The award also contains options for TSS Lots 15 and 16, which would bring the total in follow-on production contracts to $284.6 million with all options exercised. Work will be completed in Orlando and Ocala, Florida.

"The advanced capabilities and proven reliability of TSS provide the U.S. Marine Corps with a technological combat edge," said Paul Lemmo, vice president of Fire Control/SOF CLSS at Lockheed Martin Missiles and Fire Control. "Its long-range precision strike capability significantly enhances the helicopter's lethality and aircrew survivability."

Since 2008, Lockheed Martin has provided the U.S. Marine Corps with more than 100 TSS units. Production and sustainment efforts for TSS are ongoing through 2026.

For Further Information Click Here

Source: Epicos, Lockheed Martin

Northrop Grumman Signs Letter of Intent with Polska Grupa Zbrojeniowa

Northrop Grumman International Trading, a subsidiary of Northrop Grumman Corporation (NYSE: NOC) has recently signed a Letter of Intent (LOI) with Poland's largest defence company, the state-owned Polska Grupa Zbrojeniowa (PGZ), aimed at exploring potential areas of industrial cooperation.

The LOI is a first step toward closer cooperation between Northrop Grumman and PGZ in pursuing a range of advanced technologies in defence and security to deliver innovative industry-leading solutions for Poland's Ministry of National Defence.

"This LOI demonstrates our mutual interest in exploring ways in which Northrop Grumman and PGZ may be able to collaborate and address specific high technology capabilities that are of growing importance," said Tarik Reyes, vice president, business development, missile defense and protective systems, Northrop Grumman. "We hope these exploratory

discussions will result in strengthening our long-term involvement in the success of future projects."

For Further Information Click Here

Source: Epicos, Northrop Grumman

LEONARDO: Pakistan Expands its AW139 Fleet with New Orders

Leonardo announced today that the Pakistan Government has placed orders for an undisclosed number of additional AgustaWestland AW139 intermediate twin engine helicopters. The aircraft will be used to perform utility and transport operations across the nation. Deliveries are expected to start in mid-2017.

This latest purchase further expands the presence and success of the AW139 and other Leonardo models in Pakistan and confirms the AW139 as the preferred new generation helicopter choice for replacement of older types currently in service. The AW139 is the perfect fit to Pakistan's operational environment, delivering outstanding capabilities with hot and high performance unmatched by any other existing helicopter type in the same class. The new helicopters will add to the fleet of AW139 previously ordered to carry out search and rescue (SAR) and emergency medical service (EMS) duties in the country.

For Further Information Click Here

Source: Epicos, Leonardo

Boeing Continues Growth in International Training Portfolio

Reflecting continuing momentum in its international training business, Boeing has received a two-year, $18.7 million contract from the United Arab Emirates (UAE) to provide C-17 Globemaster III logistics support and training simulator maintenance.

Boeing, which originally manufactured the C-17, will support the UAE's inventory of realistic, motion-based training devices used to train aircrews and support personnel for the country's fleet of airlifters. Boeing originally designed and delivered the simulators and has previously supported C-17 training for the UAE. This most recent award is the first standalone prime contract for Boeing to perform this work.

"With this new UAE contract, Boeing will continue training the Emirati C-17 students through each phase of their careers," said Larry Sisco, C-17 training program manager. In addition to the UAE, Boeing provides C-17 training to India, the United Kingdom and NATO's Strategic

Airlift Capability. Boeing is unique in its ability to tailor its training devices and course materials to each customer's specific C-17 fleet.

“We help our customers do amazing things by delivering critical training and learning tools — affordably and on time,” Sisco added. “By maintaining our focus on innovation and service, we play a key role in helping the UAE maintain a high mission-readiness rate for its C-17 fleet.” There are 35 Boeing-installed C-17 aircrew simulators at training centers around the world, making it the world’s largest fleet of large military aircraft trainers.

For Further Information Click Here

Source: Epicos, Boeing

Harris Corporation Receives $189 Million UAE Battlefield Management System Contract

Harris Corporation has received a two-year, $189 million contract to provide an integrated battle management system (BMS) to the United Arab Emirates Armed Forces. The contract was received during the first quarter of Harris' fiscal 2017.

The Harris system will provide the UAE with initial operational capabilities as the country implements enhanced battlefield management solutions. The contract was issued under the Emirates Command & Control System (ECCS) Land Tactical System (ELTS) program, a major C4ISR program that will integrate, coordinate and maximize the combined efficiency of UAE Armed Forces assets.

“This Land Tactical System project represents a major milestone in the advancement of battlefield management and staff function capabilities for the UAE Armed Forces,” said Ed Zoiss, president, Harris Electronic Systems. "It will help ensure that the UAE Land Forces brigades are equipped to succeed on the modern battlefield.”

Harris Battlefield Management Systems offer military customers a cutting-edge, continuous operations platform for situational awareness and staff functions. Through a combination of sophisticated technology and high-value systems integration services, military users can effectively track hostile and blue forces, develop and execute tactical operations and integrate personnel, intelligence, local weather, planning, and other data into battlefield operations.

For Further Information Click Here

Source: Epicos, Harris Corporation