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Throughout 2010 Epicos' Newsletter provided up-todate information and market intelligence on selected countries from around the world that included industry news and opportunities as well as interviews

of government officials and top executives from the industry. In this present issue of the Epicos' Newsletter, we republish a selection of interviews and articles that have been published throughout 2010.

> Kyriazis Vasileios, **Epicos Newsletter Head Editor**

# Interview with Mr. Hans R. Petersen, VP of Sales & Marketing and Co-founder of Sensonor Technologies





"Sensonor has taken an approach of not targeting a specific industry or applications, however offering a set of high performance sensors that can be used across many different applications where the products performance fits the customer need. In general we see these markets consolidate towards industrial applications, aerospace, maritime, medical and defense", said Mr. Hans R. Petersen, VP of Sales & Marketing and Co-founder of Sensonor Technologies in an exclusive interview given to Epicos.

Could you please describe the current place of Sensonor in the national and international market?

Sensonor is an international company, and traditionally since the establishment of the company, most of its business has been outside Norway. This is still the situation today with more than 90% of the sales coming from abroad.

### What are the main business areas in which Sensonor is activated?

Sensonor has taken an approach of not targeting a specific industry or applications, however offering a set of high performance sensors that can be used across many different applications where the products performance fits the customer need. In general we see these markets consolidate towards industrial applications, aerospace, maritime, medical and defense. Sensonor is not focused towards offering products in















the consumer segment, nor focusing new product developments towards high volume automotive markets.

Is there a specific country or region that the company would like to expand?

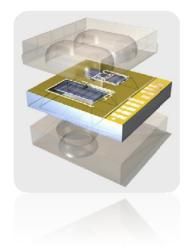
Sensonor does not prefer one specific market over another, however we see typically 3 regions, Europe, North America and Asia. Today we see the fastest growth rate in Asia, however in the long term this might not be the largest market. Today Asia has a faster design in cycle compared to the other markets for sensors that appear to be more conservative and move at a slower phase.

Could you please name the main customers of Sensonor?

No special customer to be named – Sensonor focus on standard products towards a wide range of customers

Is the company currently investing in a new technology?

The company is investing heavily in new technology and new product development. Only by being in the forefront of the performance of our sensors categories we can stay competitive in the long run as a provider of high performance products. For Sensonor it is important to take products to the market where the customer values its IP, and not only value the capability to manufacture at low cost. Today Sensonor is investing in the next generation of gyro sensors and thermal imaging sensors (uncooled bolometer)



Over the years, more than 200 million pressure sensors, more than 200 million accelerometers, and more than 2 million gyros have been shipped to your customers. What is the main reason behind this success?

The actual number of parts shall be 250 million. It is difficult appoint one particular reason for the success. One key factor is to be early out with solutions that are industrialized and that have the correct timing with respect to the market needs. Another key factor has been a well executed sales and marketing process to establish cooperation with demanding key pilot customers that are leaders in its respective industries.



Is Sensonor activated in the domain of security and defence and if yes what are the main products that is producing?

Again, Sensonor offers a range of high performance products that are not targeted to a specific industry but customers needing that performance. However we also experience that we have many requests from customers in the defense segment. Traditionally the defense industry has been a large user of high performance

sensors. Going forward Sensonor also plan to secure major business in the security / surveillance industry for its thermal imaging sensor, which mostly is expected to be in the non-defence area.

> Sensonor is offering a wide range of small and robust precision gyros with SPI communication. Are you also using this technology in your applications for the security and defence industry?

Sensonor has chosen to have a digital interface to its products, and this has been the strategy for the last 15 years. In the start we were ahead of the market going to this interface since most suppliers operated in the analog domain. For all of our new products, released and or in development Sensonor plan on using a form of SPI / digital interface between our products and the customers' application. In most cases this eases the integration of the products in the customers' application.

# Interview with the Chairman of the Board and the General Director of Policske strojirny a.s. Mr. Jaroslav Travnicek





"In the connection with the new products outcoming from company technical development program supported government programs like TIP the company is currently investing into quality testing stands for PROM/Pneu and new production line for the production of the new unique electrohydraulic wheelchair cassettelift ZDV-01-00 for buses outcoming from the technical development program of the company" said Mr. Jaroslav Travnicek, the Chairman of the Board and the General Director of Policske

### strojirny a.s.

### Please tell us about the place of Policske strojirny a.s. in the national and international market?

Policske strojirny a.s. are taking very interesting place on the national market as the only traditional Czech producer of the technology for large scale storage, manipulation and distribution of fuels, mineral oils and LPG nozzles. The HEFA® products serve for filtration, measurement and accurate deliveries of the liquids as well as for vapour recovery: Rotary Volume -Flow Meters, Filters, Air Separators, Couplings, Quick Couplings, Loading Arms as the main representants PROM/HEFA department.

In the PROM/PNEU department products is the position on the czech national market similar Policské strojirny a.s. are also the only traditional Czech producers of the buses door pneumatic rotary components supplied to the main buses makers. For Your information nowadays we cover approx. 11% of the European demand in this branch.

Through the department MTT (Ammunition and Blasting Equipment), Poličské strojírny a.s. is competitive provider of demilitarization of outdated and obsolete conventional ammunition in all central



Europe. MTT also specializes in modernization, conversions, revisions of ammunition as a cost-effective alternative to procurement of new ammunition.

As regards international market POS are exporting about 40% of its turnover. Traditional export markets are the states of former Soviet Union, Poland, Slovakia, Romania, and Bulgaria.

### What are the next steps and the priorities of Policske strojirny a.s.?

In the process of demilitarization policy of the Czech Government and large savings in the Czech Army the firm is changing it's priorities from special MTT production to strengthing and increasing the machinery engineering production into three main divisions: PROM/Pneu, PROM/Hefa and PROM/Custom made engineering production.

Main priority is technical products development aiming into the new sophisticated products competitive on the very demanded markets.

### What are the difficulties that Policske strojirny a.s. is currently facing?

Large investments crises in the Czech Republic and also leading markets are successfully broken in this year and the company aims up with it's yearly turnover in all divisions acc. to the plans for 2011-2014.

### Why someone should choose Policske strojirny a.s. to do business with?



It is difficult to say one reason only. We mean that our company has gone from 1920 the long way of the traditional production, in the last few years through strategical restructuralisation, costs, personal and production means optimalisation in order to be competitive with the new technical products development and the system of the quality certification and evaluation as the supplier for very demandable automobile industry and export customers. That is why we should be reliable company to do business with.

### If there is a specific country that Policske strojirny a.s. is going to expand?

In PROM/Hefa division it is necessary to orientate the marketing activities mainly for tenders in the oil producing countries together with the leading Czech engineering companies in the countries like Iraq, Kuwait, Afghanistan, Sudan, Algeria, Kazakhstan, Libya, etc. taking advantages of the Czech state support (Czech Trade, Czech Invest, Czech Exporting Bank, EGAP, etc.) in order to increase the turnover reasonably.

There are also some new productions of the machinery engineering prepared for realization to diversify the scale of the production of the company (New Separator with Filter, Package Pump Stations, Electro-hydraulic Wheelchair Cassettelift for Buses, New Door System for Buses, etc.).

### What are the main advantages of Policske strojirny a.s.?

The main advantages we see in the finalization of the company restructuralisation aiming into the improvement of the services to our strategical customers.

### Is the company is currently investing in a new technology.

In the connection with the new products outcoming from company technical development program supported by government programs like TIP the company is currently investing into quality testing stands for PROM/Pneu and new production line for the production of the new unique electro-hydraulic wheelchair cassettelift ZDV-01-00 for buses outcoming from the technical development program of the company.

# Interview with Mrs. Jennifer Telussa, Marketing Sales and communication manager, Geocopter





"Geocopter continuously improves its product and keeps updated with the latest developments regarding aircraft components and sensors", said Mrs. Jennifer Telussa, Marketing Sales and communication manager, Geocopter on an exclusive interview given to Epicos.

Could you please describe the current place of Geocopter in the national and international market?

Geocopter is one of the world's market leaders in its class.

Is there a specific country or region that the company would like to expand?

No, the company is not focusing in any specific region. Geocopter is operating worldwide.

> Is Geocopter currently investing in a new technology?

Geocopter continuously improves its product and keeps updated with the latest developments regarding aircraft components and sensors.

Could you please name the main customers of Geocopter?

The main customers of Geocopter are universities, R&D institutes, other government agencies and private industries.

What are the main business areas in which Geocopter is activated?

The helicopter can be used in a variety of business areas, like:

✓ Real-time emergency response support (i.e. support fire brigade, provide GPS position suspects)



- ✓ Defense (i.e. detection of explosives)
- ✓ Construction (i.e. mapping building sites)
- ✓ Geo information (i.e. 3D mapping, biomass mapping)
- ✓ Petrochemical industries (i.e. monitoring of flare stacks)
- ✓ Traffic management (i.e. monitoring of traffic flows)
- ✓ Water management (i.e. monitoring of water level in dikes)
- ✓ Environmental monitoring (i.e. heat loss of buildings)
- ✓ Film/TV (stabilized HD video images)
- Can you please describe the advantages of the Unmanned Aircraft Systems (UAS) of Geocopter?

### Geocopter offers a helicopter with:

- ✓ Operational costs 10 times lower than manned helicopters;
- ✓ Several back-ups built in, i.e. two turbine engines with One Engine Inoperative (OEI) capability;
- ✓ One-piece lightweight composite body of carbon;
- ✓ Ability to lift 30 kg state-of-the-art sensors;
- ✓ Delivered with sensors of the customer's choice.
- ✓ Designed to fly up to 4.000 meters above mean sea level;
- ✓ Silent operation at 100 meters and above;
- What are the main missions that the Unmanned Aircraft Systems (UAS) of Geocopter can perform?

Geocopter creates new opportunities with its special features. For the missions please refer to my 5<sup>th</sup> answer.

# Interview with Mr. Vassilis Savvaides, General Manager of THEON Sensors





"Theon Sensors is the Number One producer of Night Driver Viewers based on image intensifier in the world. In addition to this product, Theon also produces state of the art weapon sights using unique key technology such as interchangeable ballistic reticules as well as Night Vision Sniper Clip-On sights, monoculars and goggles", said Mr. Vassilis Savvaides, General Manager of THEON Sensors, in an exclusive interview given to Epicos.

Could you please describe the current place of THEON Sensors in the national and international market?

Theon Sensors is the leading supplier of Night Vision Equipment to the Hellenic Armed Forces. Additionally, is constantly expanding its presence in the international market.

What are the main business areas in which THEON Sensors is activated?

Theon Sensors main business areas are Night Vision Systems based on Image Intensifying Technology. Furthermore in 2005, the MEMS (Micro Electro-mechanical Sensors) was

founded opening up a second technological area for Theon Sensors.

What are the main products that THEON Sensors is manufacturing?

Theon Sensors is the Number One producer of Night Driver Viewers based on image intensifier in the world. In addition to this product, Theon also produces state of the art weapon sights using unique key technology such as interchangeable ballistic reticles as well as Night Vision Sniper Clip-On sights, monoculars and goggles.

What are the main technological advantages of the company's products?



Theon Sensors' products are all designed to Mil Spec using highest quality and performance standards.

Is there a specific country or region that the company would like to expand?

Theon is currently active on 5 continents and pursues business opportunities around the world.

Could you please name the main customers of THEON Sensors?

Theon Sensors is active around the world with business in countries such as Australia, Austria, Belgium, Chile, Greece, Portugal, the Netherlands, Spain, Kuwait, UK, USA and other countries.

Is the company currently investing in a new technology?

Yes, Theon Sensors R&D department is constantly improving the existing product range while developing new systems taking into account the latest available technology trends.

What are the next steps and priorities of THEON Sensors?

The company will try to create new night vision and thermal imaging products. Additionally, we will try to further expand our international sales.



Theon sensors participated in the Eurosatory exhibition in Paris. Would you describe your presence there as a success?

Theon Sensor's presence was certainly a great success. Many new contacts were signed there and several visitors of the exhibition admired the products of Theon.

# Interview with Mr. Oren Barkai, Senior Product Manager & Solutions Team Leader, of Integrated Solutions LoB Network Solutions Division of ECI Telecom LTD





"Through ECI's 1Net framework, focused on optimized transition to more competitive networks, we are addressing the challenges and needs affecting providers today and in the future. By partnering with us, our customers — service providers, networks and cable operators, government & defense entities, utility carriers and carrier-of carriers, and even municipalities — all benefit from long-standing innovation and leadership in the telecom sector", said Mr. Oren Barkai, Senior Product Manager & Solutions Team Leader, of Integrated Solutions LoB Network Solutions Division of ECI Telecom LTD, in an exclusive interview that he gave to Epicos.

Could you please describe the place of ECI Telecom in the national and international market?

Beyond the traditional role of a telecom vendor, ECI Telecom has become the partner for growth to our customers worldwide. Through ECI's 1Net framework, focused on optimized transition to more competitive networks, we are addressing the challenges and needs affecting providers today and in the future. By partnering with us, our customers – service providers, networks and cable operators, government & defense entities, utility carriers and carrier-of carriers, and even municipalities – all benefit from long-standing innovation and leadership in the telecom sector. ECI's platforms enable key revenue-generating applications, such as business services, voice, video and wireless backhaul. Our service expertise facilitates service deployment, maintenance and on-going operations, while optimizing capex and reducing opex.

ECI Telecom Israel has implemented a cutting edge Advanced Military Communication E2E Solution for the Israeli Defense Forces (IDF) that is being used most effectively for its ongoing operations.

The network encapsulates a layered approach that enables the provisioning of core Network Centric Warfare (NCW) applications together with operational, logistical and administrative communication services. It is based on COTS (Commercially of the Shelf) equipment, modified to support stringent requirements of Critical Mission applications.



Defense and Homeland forces in many countries are considering establishing their own stationary strategic network or have already made substantial investments in infrastructure to provide Defence applications. ECI Telecom's approach to establish such network is evolutional concept and enables a gradual migration from legacy network to the state-of-the-art IP-MPLS based network in a seamless manner, supported by a common OSS to manage all the network layers.

ECI Telecom has already operationalized such networks at other Defence customer in the world.

#### What ECI Telecom offers to its customers?

ECI Telecom and its partners are offering best of breed, secure, reliable products that enable the military, police and Homeland security establishment to effectively implement a network centric approach to warfare and defense issues. The Armed Forces and Homeland Security Forces are facing many major challenges in changing their approach and it is in the process of adapting the same technological and communication advances that have changed the world of business and industry. ECI is in a unique position to help this process because it is a major provider to industry and has had a close collaboration with the IDF and other defense

forces for many years. ECI has had extensive experience in selecting and integrating the most efficient and cost-effective solutions that have been combat tested. Always on the cutting edge of technology, ECI and its partners are able to provide flexible, scalable solutions to help the Military and the Homeland Security Forces achieves its goal of "one target – one bomb".

ECI supports every stage of evolution with the most appropriate technology and that enables smooth migration towards full network centricity. This involves support at all stages of implementation to enable:



- High availability
- Legacy support
- Flexibility
- Manageability
- Smooth migration for legacy to next generation IP

ECI offers the technical expertise and the situational understanding along with the best solutions that the market can offer to support military demands and requirements.

Are there any specific markets, apart from Israel, that ECI Telecom is currently activated?

We are a global company with more than 35 offices. We are present in all continents (apart from Australia)



Could you please describe the main products that ECI Telecom is producing? What are the main characteristics of them?



ECI has several lines of business:

MSPP (Multi Service Provisioning Platforms) – multiplexers of transport technologies (PDH, SDH, Ethernet and ATM).

Optics – optical transport platform for short, medium and long haul.

CESR (Carrier Ethernet Switch Routers) – Carrier class solutions for Ethernet transport.

Management and planning tools to match the capabilities said above.

Integrated Solutions – integrating 3rd party S/W and H/W to create with ECI's own solution a more fitting solution to customer's needs.

And finally, encryption and information security

What are the main technological advantages of ECI Telecom?

ECI's main technological advantage is that it's solution are battle proven even though they are COTS (Commodity Of The Shelf)

What are the next steps and priorities of the company?

The company is looking to expand its customer base and also move into homeland security. In HLS the company is developing its offering and has started to work with several key customers.

➤ 1Net is a unique feature that the company offers to its customers. Could you please describe the concept behind this idea?

1Net is not a feature but a framework of how to transform in business as well as technological terms the network. The network is undergoing heavy changes in all vertical, including the defense forces. It's impact increases dramatically and therefore a transformation strategy is required. That is where 1NET comes in.



The company is investing in several technologies such as:



- -Microwave communication technology
- -Special algorithms for network design and simulation
- -Optical technologies of 100G and above
- Why should someone choose ECI Telecom to do business?

There are several reasons. We are not shackled to our own portfolio. We know how to offer best of breed and have done so successfully and reputedly. Additionally, we understand how defense forces networks should be and these are not enterprise class (the way some of our rivals position it). Furthermore, our team and solutions are battle proven and know what it takes to transform those networks. Finally, we customize our solutions to fit unique needs of every customer and we have developed special platforms for our customer, something the competition has never done.

Could you make a comment about the international Aerospace and Defense Industry and its orientations?

The defense industry has been growing by about 4% annually (based on SIPRY evaluation 2009). The communication part of the defense budget has been growing even more. In every project which is not a platform (tank, airplane) there is a need of communication. ECI focuses on the strategic part, which is sometimes overlooked. All the C2 applications require bandwidth that is what we aim to provide. We believe that the industry will continue to grow and shift towards HLS.

### **Australian Defence Industry**





Australia's defence industry comprises an important part of the country's wider national economic and industrial capacity. The national defence industry, including the primes and Small to Medium Enterprises (SMEs) employs around 29,000 people. SMEs account for approximately 50% of the employment in the sector. Nevertheless, about 70% of the value of defence materiel produced in Australia for the national

Defence Ministry is initially sourced from eight prime contractors. In total the aforementioned companies recorded sales revenue of 3.8 million US dollars. Despite the predominant place that these eight companies have in the local industry around 30% of their work is subsequently subcontracted to smaller firms in Australia and overseas. Estimations suggest that there are over 3,000 SMEs in Australia's defence industry.

The aforementioned data highlights the important place that SMEs have in Australian defence industry and the enhanced position that may have in the future. One of the main factors that will shape the future of the defence SMEs is innovation and their ability to place themselves in a constantly changing national and international environment.

The Primes in Australian Defence Industry

Prime Parent Company/Owner		Country of Origin	Key business in Australia	Per cent of parent's total revenue from Australian sales and exports	Stock Exchange listed on Not applicable	
ASC Pty Ltd	Pty Ltd Australian Australia Submarine maintenance and ship construction			Not applicable		
Australian Aerospace	EADS	France, Germany & Spain	Helicopters	<1	Euronext Paris	
BAE Systems Australia	BAE	UK	Varied, including aircraft maintenance and upgrades, ship construction and maintenance, upgrades to the M113 armoured personnel carriers and support to the Black Hawk helicopters	3.2	London Stock Exchange	
Boeing Defence Australia	Boeing	US	Aircraft production and maintenance	0.5	New York Stock Exchange	
Raytheon Australia	Raytheon	US	Combat systems integration	1.3	New York Stock Exchange	
Saab Systems	Saab AB	Sweden	Land and maritime combat management and C2 systems	3.1	Stockholm Stock Exchange	
Lockheed Martin Australia	Lockheed Martin	US	Electronic and Information systems delivery and support	<1	New York Stock Exchange	
Thales Australia	Thales	France	Ship upgrades and maintenance, production of military vehicles and provision and maintenance of EO	3	Euronext Paris	

### Ministry of Defence, Australia

Innovation is as key driver of productivity. It refers to the introduction of new or improved

goods and services and the implementation of better processes. It can include the development of new technology, an adaptation of existing technology to a new use or organizational and managerial change. Hence, innovation is a prerequisite for the maximization of productivity. Australian SME's have often provided an innovative niche capability in support of defence, especially in the area of high technology.

The country's authorities acknowledged this and created new programs that will further enhance their innovation, productivity and competitiveness.

A total of 445.7 million US dollars in programs especially for the defence industry out to 2019 will be invested. This funding includes 44.9 million US dollars to sustain the Priority Industry Capabilities (PICs), 59.9 million US dollars for the Global Supply Chain (GSC) program, 34 million US dollars for the Defence Export Unit, 89 million US dollars, for the

Skilling Australia's
Defence Industry
program, 49.2 million US
dollars for the Industry
Skilling Program
Enhancement package



and 27.1 million US dollars for the Defence Future Capability Technology Centre Program. Finally, as approved in 2009, the government is investing 51 million US dollars in research and development through funding for the Capability and Technology and Demonstrator program, as well as 31.6 million US dollars for the Capability and Technology Demonstrator Extension program.

The increased globalization of the defence industry in recent years has enabled Australia to source many of its defence acquisitions from other countries. Of course this has weakened the prospect of the Australian SMEs as they had to compete with the "giants" of the industry. On the other hand new paths have been opened for them as they had a clear advantage in becoming a part of the global supply chain by creating synergies with the foreign companies activated in Australia. The approach that Australia SMEs will have towards this will, in a great extent, from their future.

### Polish Defence Procurements in the New Era



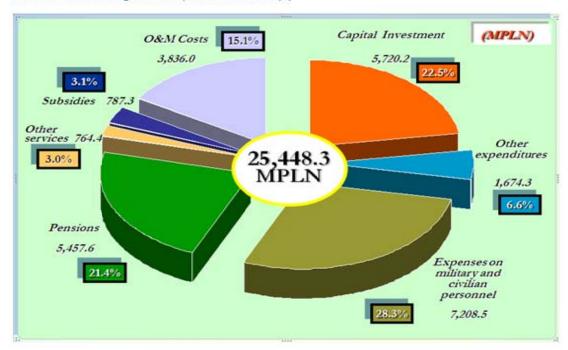


The Polish security system is based at a modern defence system which is an

integral part of the defence system of the European Union and NATO. Therefore, the contribution of Poland in this system is mainly the participation of the national Armed Forces in different operations carried out outside the Euro-Atlantic zone in accordance with mandates of the aforementioned internationally recognised organisations. In order to achieve this goal Poland has to form well-trained and equipped armed forces. Hence, Polish authorities allocate every year a significant amount of funds in the modernization of the armed forces

Of course, the funds allocated are spend properly and under the constant screening of public and social institutions, namely the Ministry of National Defence, the Parliament and the Senate and its Commissions of National Defence, the Highest Chamber of Control and the mass-media. The particular procedure of working out and endorsing the budget of the Ministry of National Defence is defined in the Public Finance Act from 26th of November, 1998.

Structure of MoND budget in 2010 (MPLN=Million Zlotys)



### Ministry of National Defence, Republic of Poland

The Polish defence budget has been considerably augmented during the last decade. In 2000 it was 13,763 million zlotys, whereas in 2010 it reached 25,719 million. Additionally, Poland's imports over the period 2004–2008 were 160% higher than in 1999–2003, due primarily to the import of 48 F-16 combat aircraft from the United States. It was the second largest importer of major conventional arms in the EU and 15th largest in the world.

As it is stated above USA is the main exporter of military goods to Poland. Poland procured (48) F-16C Block-50/52 aircrafts the delivery of which concluded on 2008. Poland and the USA have further enhanced their co-operation when Poland loaned (40) Cougar APC/ISV vehicles for use in Afghanistan. Cougar is an armored fighting vehicle designed to be resistant to anti-vehicle mines and improvised munitions and therefore was an important

Imports (expressed in US\$ m. at constant 1990 prices)

	2006	2007	2008	2009	Total
USA	356	865	498	22	1741
Italy	45	57	32	32	166
Finland	23	23	17	14	78
Spain	-	26	26	-	52

Source: SIPRI Publications, Arms Transfers Database

addition for the Polish Armed Forces deployed in Afghanistan.

Italy is the second exporter of defence equipment based on the amount of funds allocated. In the period 2004-2009 (313) HITFIST IFV turrets were delivered to Poland. The total amount of the procurement was \$308 million US dollars and was accompanied by an offset deal, which included the production of (241) turrets in Poland.

The turrets procured from Italy were placed in (358) XC-360 AMV APC procured from Finland. The contract included a 133% offset package deal. From the (358) vehicles acquired (313) were fighting and (32) reconnaissance vehicles. Finally, Poland procured (2) C-295 Transport aircrafts. The delivery of the aircrafts was concluded in 2007 and the total amount was 114 million US Dollars.

## **Colombian Defence Acquisitions**





Colombia is trying to create the appropriate environment for further consolidation of its national defence infrastructures. As part of this procedure Colombian armed forces have gone through an important modernization plan over the last decade. The augmentation of the national defence budget is one of the main steps in a broaden spectrum of reforms. Under this concept the total sum of military spending rose to \$10,055 billion in 2009 from \$ 6,643 billion that it was in 1999. Additionally, the defence budget, as a percentage of the national Gross Domestic Product (GDP) increased by 2.8% of GPD that was in 1999 to 3.7% in 2009.

This increase in military spending created a raft of major arms acquisitions in recent years, in Colombia. USA is currently the main exporter of arm in Colombia. Apart from USA, important countries that export arms to Colombia are Spain, Israel, Russia and Brazil. Imports are rather diversified in their geographical structure. USA is the predominant importer but the next four (4) places are occupied by one (1) European country (Spain), a country from Middle East (Israel) one from Asia (Russia) and finally one

Military expenditure of Colombia

	2005	2006	2007	2008	2009
In constant ( 2008 ) US\$ m.	6,643	7,533	7,742	9,076	10,055
percentage of gross domestic product	3.3%	3.4%	3.3%	3.7%	-

Source: SIPRI Publications (http://milexdata.sipri.org/result.php4) from South America (Brazil).

One of the defence systems that Colombia procured from USA during the last years was 15 UH-60L Blackhawk Helicopters. The total amount of the procurement was 225 million US dollars. Additionally, the country procured four (4) C-295 transport aircrafts from Spain and modernized 11 Israeli Kfir C-7 fighting aircrafts to Kfir C-10 for 162 million US dollars. Furthermore, Colombia acquired four (4) Mi-8/Mi-17/Hip-H Helicopters from Russia for a total amount of 24 million US dollars.



Finally Colombia ordered from Brazil 25 EMB-314

Super Tucano, an enhanced version, with faster speed and higher altitude, of the EMB-312 Tucano trainer aircraft. The total amount of the procurement was 235 million US dollars. The deliveries of the airplanes started in 2006 and completed in 2008. Colombian government is planning to use EMB-314 Super Tucano against FARC and ELN rebels. The funds for the procurement were allocated from a loan approved by Brazilian Banks.

With these acquisitions the Colombian air forces seriously enhanced their operational readiness. The Super Tucano, has entered duty for counter-insurgency and counter-terrorism operations, while Israel's IAI K-Fir will be responsible for air superiority missions in

### Colombian Defence Imports (expressed in US\$ m. at constant 1990 prices)

\* '0' indicates that the value of deliveries is less than US\$0.5m

	2006	2007	2008	2009	Total
USA	33	72	12	135	253
Spain	-	13	41	13	67
Israel	-	-	-	66	66
Russia	0*	29	-	34	63
Brazil	12	24	24	-	60

### Source: SIPRI Publications, Arms Transfers Database

the operation theatre. Additionally, the acquisition of UH- 60 has significantly improved the capability of the army to perform assault operations together with the simultaneous upgrading of their logistic support output with the increased heavy transport ability of the Russian made helicopter MI-17 and the Spanish CN-295 military transport aircraft, especially in areas of particularly difficult access to other means.

Colombia is going through a period of modernisation. Under this inspiration the Colombian Armed Forces are undergoing a process of alternation that is parallel and in accordance with this procedure. Under this context Colombian procurement philosophy is trying to renew the national armament in accordance with the special requests of the armed forces and the particular geographical characteristics of Colombia.

### Special Focus: South Africa's Economy



South Africa is a middle-income country, with fully developed basic infrastructure. It has abundant natural resources and well-developed financial, legal, communications, energy and transport sectors. Additionally, has a stock exchange ranked among the top 20 in the world and a modern infrastructure supporting efficient distribution of goods throughout the country's region. Furthermore, South Africa is the gateway to other African markets as plays a significant role in supplying energy, relief aid, transport, communications and investments on the continent. Since the advent of democracy in 1994, the economy

has been renovated, as prompt and able macroeconomic reforms have boosted competitiveness, growing the economy, creating jobs and opening South Africa up to world markets.

During this period of solid development the country's annual economic growth rate has averaged over 4%, whereas in the decade prior to 1994, economic growth averaged less than 1% per year. South Africa's real gross domestic product (GDP) rose by 3.7% in 2002, 3.1% in 2003, 4.9% in 2004, 5% in 2005, 5.4% in 2006 - the highest since 1981 - and 5.1% in 2007. It is indicative that in the fourth quarter of 2007, South Africa recorded its 33rd quarter of uninterrupted expansion in real GDP since September 1999.

The aforementioned situation was averted as South Africa's economy started to slow in the second half of 2008 due to the global financial crisis' impact on commodity prices and demand. In 2009 GDP fell nearly 2%.

In the first quarter of 2010 the country's economy has shown signs of retaliation. It is indicative that the seasonally adjusted real GDP at market prices for the first quarter of 2010 increased by a rate of 4,6% compared with the fourth quarter of 2009. The main contributors of this increase for the first quarter of 2010 were the manufacturing industry (1,3 %), the mining and quarrying industry (0,8 %), the finance, real estate and business services industry (0,5%), wholesale, retail, motor trade accommodation industry and the general government services (0,4 %). Additionally the African Reserve Bank (SARB) forecasts in



its latest projections that South Africa's real output is expected to grow at annual average rates of 2.7% and 3.6% in 2010 and 2011 respectively.

South Africa's economy has been significantly developed throughout the last two decades. Unfortunately, though, daunting socioeconomic problems remain. One of these is unemployment. The results of the first quarter of 2010 show that between the fourth

quarter of 2009 and the first quarter of 2010, the number of unemployed persons in the



country increased by 145,000 to approximately 4,3 million resulting in an increase in the unemployment rate by 0,9 % to 25,2%.

In its 2007 annual country report the International Monetary Fund (IMF), noted that South Africa's economy was "undergoing its longest expansion on record, and in recent years has experienced elevated growth in an environment of rapid credit expansion, booming asset prices, strengthening public finances, and rising international reserves financed by large capital inflows." In the same report the IMF identified the overwhelming issue of

unemployment as one of the biggest challenges to economic growth in the country. Until then the economic environment of the country remains the same. Economic growth is the case whereas unemployment along with other socioeconomic problems such as poverty, large wealth disparities and a high incidence of HIV/Aids continue to be an open wound for the country.

# Special Focus: Slovak Republic



Slovakia has made significant economic reforms since its separation from the Czech Republic in 1993 and currently can be fairly characterized as a developed country. With the highest sustained Gross Domestic Product (GDP) growth (10.4%) in the European Union during 2007, the Slovak economy was considered to be a tiger economy known as the Tatra Tiger. In 2009 global

economic recession impacted many segments of the national economy and as a result GDP fall nearly 5%.

After the fall of the communist regime and the "velvet divorce" with Czech Republic, Slovakia was obliged to go through some complicated and painful reforms. The country had to carry out a demanding transformation from the system of ineffective centralised planning economy to a market economy. As a result the economic relations that were formed during the "communist era" were demolished and the country confronted with the consequences of this fact. It lost comfortable and traditional markets and politically guaranteed exports and imports. Moreover, the structure of production and its main orientation on heavy

industry was completely unsuitable for the new socioeconomical environment. Nevertheless, Slovakia steadily proceeded with the necessary economic reforms.

As a result the socio-economical structure of the country altered after the mid 1990's. Favourable geographical location, its qualified workforce and its relatively low wages made the country a very attractive destination for foreign investors. Furthermore, the introduction of a flat 19% tax, in 2004 created a new wave of interest by foreign investors. Apart from the internal economic structure the country also changed its international economic profile. In 2000 became the 30<sup>th</sup> member of the Organization for Economic Co-operation and Development OECD; in 2004 joined the European Union and in January 2009 adopted the Euro currency.



All these developments helped the country's economy to grow beyond expectations between 2000-8. It is indicative that Slovakia had a GDP growth of 10.4% in 2007 which was the highest sustained Gross Domestic Product (GDP) growth in the European Union.

Nevertheless, throughout these years the authorities of Slovakia faced a stubborn problem, unemployment. In 2003-2004 unemployment was at the unacceptable 18% it dropped to 7.7% in 2008 and climbed again at 12% a fact indicating that it remains the economy's Achilles heel.

	2005	2006	2007	2008	2009
GDP real growth (%)	6.7	8.5	10.6	6.2	-4,9
Unemployment rate (%)	16.2	13.3	11.0	9.6	11.9

Source: Financial Policy Institute (FPI)

Another socio-economical problem that Slovakia faces is the inequality in economic productivity and standards of living in individual regions of the country. The vast amount of foreign investments and economic growth has gone to Bratislava and western Slovakia, whereas some parts of south central Slovakia are underdeveloped. In the long term, Slovakian authorities should resolve this problem and try to create the proper conditions for a more homogenized economical growth.