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Need for Modernisation and Portuguese Defence Procurements



Portugal, is trying to adjust to the existing strategic environment by taking into consideration two important facts. The security of its own territory and the fact that is a member of several international organisations, such as the United Nations, the European Union, the North Atlantic Alliance and the Commonwealth of Portuguese-Speaking Countries. Portugal fully acknowledges the aforementioned ascertainment and undertakes the interests and responsibilities derived from this. In recent years, its armed forces have been actively involved in the activities of international missions organised by these organisations. In order to facilitate participation Portuguese authorities allocate significant amount of funds in defence. In 2010 this amount rose to 3,805 million Euros from 3,463 million that was in 2009. The majority of these funds are spent on revenue expenditure such as the salaries and pensions of armed personnel and operational and maintenance costs.

Within this framework Portuguese Armed Forces' since 1991 have continuously participated in crisis response, humanitarian and peace-keeping operations with significant presence in Balkans and Africa.

In order to keep having an army Portugal should continue moderately spending on the army and air force. On the contrary the navy is in dire need of new platforms as most of the fleet is either past its operational lifespan or will reach the end of it in the next five years.

Military expenditure of Portugal

	2005	2006	2007	2008	2009	2010
In million Euros	3,248	3,242	3,190	3,285	3,463	≈3,805
percentage of gross domestic product	2.1	2	1.9	1.9	2.1	-

Source: SIPRI Publications (<http://milexdata.sipri.org/result.php4>)

This is the reason why in 2004 Portugal procured (2) Type-214 Submarines from Germany. The total amount of the procurement was 846 million Euros. The purchase included an offset package of a 100% value of the amount of the procurement. Deliveries were completed during 2010.

With this procurement Germany is currently the main exporter of arm in Portugal. Apart from Germany, important countries that export arms to Portugal are Netherlands, USA and Spain. Imports are rather concentrated in their geographical structure as (3) of the (4) first countries that export arms to Portugal, based on the amount of funds allocated are European. This can be easily explained by the intense socioeconomic relations that the

country has with the other members of the European Union. After all, Portugal became a member of the Union in 1986 and a member of the European Monetary Union (EMU) in 1999.

In November of 2006, the Portuguese Defense Minister, Nuno Severiano Teixeira signed a contract for the purchase of the frigates Van Nes and Van Galen, previously in service with the Dutch Navy. Van Nes, renamed NRP Bartolomeu Dias (F333), was transferred to Portugal in January of 2009 and Van Galen, renamed NRP Francisco de Almeida (F334) and was transferred in January of 2010. The total amount of the procurement was 240 million Euros. Frigates replaced Joao Belo class ships reaffirming the political decision of Portuguese authorities for the renewal of the country's fleet.

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

	2006	2007	2008	2009	2010	Total
Germany					550	550
Netherlands	165		19	183	137	503
USA	43	58	91	102	90	383
Spain			26	91	90	207

Source: SIPRI Publications, Arms Transfers Database

During 2010 one more major defence acquisition was completed as USA delivered the remaining F-16C FGA aircrafts. The total amount of the procurement reached 268 million euros. Finally, in February of 2006, Portugal ordered (12) C-295 aircrafts, (7) for military transport and five for maritime surveillance. Deliveries were completed on 2010. The C-295 aircrafts replaced the C-212 Aviocar, previously in service with the Portuguese army.

Taking into consideration the characterizing factors of the existing international environment, with its inherent transnational threats and opportunities, Portugal is committed to creating modern Armed Forces. In order to fulfill the aforementioned goal the country is spending in line with NATO requirements, around 2% of GDP on defence, something that will probably continue happening in the future.

Kyriazis Vasileios
Epicos Newsletter Head Editor

Portuguese Defence Industry and Exports

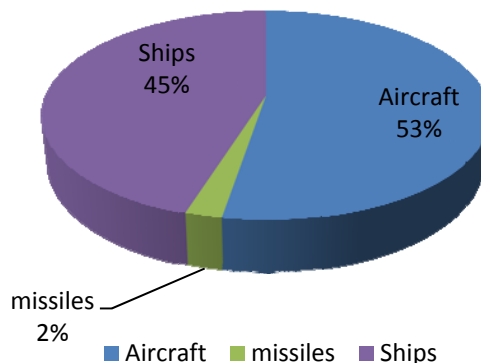


Portuguese defence industry expanded during the 1960s. The reason was that the country needed to meet the specialized requirements of the anti guerrilla operations in Africa. A stable base was created upon which the

Portuguese defence industry had slowly built. Even after the end of the fighting in the middle 1970's and the subsequent scaling down of the armed forces, the capabilities of defence industry exceeded the country's needs, resulting in a modest level of sales abroad. Nowadays, Portugal's defence industry is trying to establish the basic conditions for modernization and sustained development. As a result a moderate industry has been developed and some companies are even exporting part of their production. According to Stockholm International Peace Research Institute (SIPRI) for the period 2008-2010, Portuguese companies exported equipment amounted to 133 million US dollars expressed at constant (1990) prices.

The Portuguese defence industry is dominated by a series of important companies. One of them is EID (Empresa de Investigação e Desenvolvimento de Electrónica). EID, provides communication systems for the armed forces of Portugal, Spain, Lithuania and the UAE. Another important company is Empordef (Empresa Portuguesa de Defesa), which controls OGMA Indústria Aeronáutica de Portugal and Edisoft (Empresa de Serviços e Desenvolvimento de Software). The main activities of OGMA are to provide aviation repair, maintenance and overhaul support to the Portuguese armed forces. Furthermore, Edisoft provides software engineering solution to national and international customers, such as the Portuguese Ministry of Defence (Ministério da Defesa Nacional -- MDN) and major defence companies like DCNS, Thales and the VT Group.

Arms exports from Portugal by category, 2008-2010



Source: SIPRI Publications

Several companies are activated in the aerospace industry. Major aircraft manufacturers rely on Portuguese companies in very sensitive issues like sensors. It is indicative that Airbus A380 is built with optic fiber sensors manufactured in Portugal. Additionally, several other components such as the switchboards of Airbus 340 and even structural components for Airbus A320, A330 and A340 and



Embraer 145, 170 and 190 airliners and also components for fighters, are manufactured in Portugal. Portuguese expertise in aeronautical industry includes also high tech management systems. Furthermore, Embraer is planning to start a 148 million euro project in Evora that will begin operating in the beginning of 2012.

As it is already mentioned Portuguese companies export part of their products. Portuguese arm exports are rather limited in their geographical structure and range of exported items. Four countries (Belgium, Chile, Mozambique, and Uruguay) imported defence equipment from Portugal for the period 2008-2010. Aircrafts and ships are the predominant area of exports for a total amount of 130 million US dollars expressed at constant (1990) prices.

Kyriazis Vasileios

Epicos Newsletter Head Editor

Epicos "Industrial Cooperation and Offset Projects"



Epicos "Project Opportunities" 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](#)

Development of a CCTV Surveillance and Biometrics Access Control System for Homeland Security and/or Military Applications

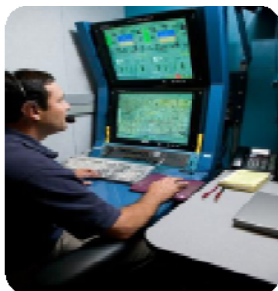


A company active in the fields of video technology and biometrics-based entry control is proposing the development of a CCTV Surveillance and Biometrics Access Control System for Homeland Security and/or Military applications. This system will be based on a combination of legacy sub-systems already developed and fielded in several customers but it could also include the latest advances in video surveillance and biometrics-based entry control technologies.

[For Further Information Contact our ICO Department](#)

Mail at: g-menexis@epicos.com

Provision and Installation of an Airborne Video Surveillance System for Homeland Security applications to a targeted country



A company excelling in the area of embedded systems and avionics is willing to undertake the task of collaborating with a local partner in a targeted country for the provision and installation of its Airborne Video Surveillance System to be used on Homeland Security (HLS) platforms (UAV, UGV, stationary posts). The system can be installed as stand-alone equipment or integrated in a major HLS system.

[For Further Information Contact our ICO Department](#)

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Naval Institute Guide to World Naval Weapon Systems, by Norman Friedman



Written by one of the world's leading naval analysts, World Naval Weapon Systems is recognised as one of the most comprehensive references on the domain of naval weapon systems. It describes the weapons currently in service in ships, submarines, and naval aircraft around the world and examines the crucial relationship between them. Additionally, it provides a thorough analysis of the development that the naval weapons have undergone in order to tackle with the strategic challenges that international naval forces are facing today. World Naval Weapon Systems is probably the most complete and up-to-date source about weapons in every navy in the world and it is an essential work that, in effect, can serve as a textbook of modern naval technology.

The Relations between Defence and Civil Technologies, by Philip Gummert and Judith Reppy



Technology is becoming ever more crucial for economic competitiveness. While earlier European fears of the "American challenge" were being replaced on both sides of the Atlantic by concern over Japanese performance, awareness was growing in all industrialised countries about the need for a healthy, growing technology base. An important element of this awareness has been the attention paid to the relationship between civil and defence technology. The relationship is problematic for several reasons, not least the fact that whereas most large industrialised nations spend heavily on military research and development programmes, Japan spend very little. At the same time there has been an increased concern about how to manage the rising cost and complexity of military equipment.



SIA takes bold gamble with new budget carrier

Singapore Airlines' decision to launch a long-haul budget carrier is a risky but necessary gamble as it comes under growing pressure at both ends of the market, aviation analysts said.

SIA, one of the world's most profitable premium airlines, surprised the industry on Wednesday by announcing plans to tap into the region's growing appetite for budget air tickets on medium- to long-haul destinations.

The sector is currently dominated by neighbouring Malaysia's AirAsia X, which was launched four years ago and flies to 14 cities including London, Tehran, Paris, Seoul and Tokyo as well as destinations in China, India and Australia.

SIA said it aims to launch its wholly-owned but independently managed low-cost operation within one year using wide body aircraft.

The announcement came amid intensifying competition in first and business class travel, with rivals such as Hong Kong's Cathay Pacific and Gulf carriers like Emirates and Etihad muscling into SIA's premium turf.

Analysts estimate that SIA gets 40-50 percent of its revenue from the higher end of the market.

"Low-cost carriers, even for long haul, is the way forward," said Julius Yeo, a Singapore-based aviation analyst with Frost and Sullivan consultancy.

"The downside is the worry about diluting the SIA brand but the good part is they are willing to take the risk," said Yeo.

"If you want to succeed, you have to take some risk."

The huge capital outlay typically needed to start a new airline from scratch is another cause for concern but the move will also reap huge dividends if SIA gets its formula right, said another analyst.

"The trick for them is to find the right mix of aircraft, destinations and feeder traffic," said Shukor Yusof of Standard and Poor's Equity Research.

But Shukor is confident that SIA, one of the world's richest airlines with a cash reserve of around Sg\$7.0 billion (\$5.7 billion), has what it takes to make the new airline a success.

"Somebody like SIA will not go into something like this without having done their homework," said Shukor.

"I have no doubt that they can make money from this," he added.

But there is also a risk the new airline may actually eat into SIA's own turf.

"Cannabilisation will remain a worry," said analysts from CIMB Research who have nicknamed the new airline "SIA X" in a report.

Still, it makes sense for SIA to make a pre-emptive move to defend its home turf with Australia's Jetstar already planning to launch long-haul flights from Singapore to various European destinations, they added.

"It is a far better option for SIA to start 'SIA X' now and establish its market presence than to wait for the Australians to steal the thunder in SIA's home market," they said.

Jetstar already flies from Singapore to various destinations in Australia and the Asia-Pacific region.

SIA said it will reveal more details about the new airline including its branding, management team and route network at a later date.

The Sydney-based Centre for Asia Pacific Aviation (CAPA) said the plan is an acknowledgement by SIA that it can no longer rely on premium travel to drive future profitability.

"The message is that the carrier, despite its very high quality product, cannot grow profitably by only focusing on the top end of the market," CAPA said in a report.

"Launching a low fare operation should help SIA Group mitigate its risk. Currently the group has been putting most of its eggs in the full service, top end basket."

The Singapore carrier already owns a regional unit, SilkAir, that flies to popular Asian holiday destinations and has a one-third stake in Tiger Airways, a locally-based budget carrier that also flies to cities in Asia and Australia.

SIA announced in May it earned a profit of Sg\$1.09 billion in the year to March 2011 on revenues of Sg\$14.5 billion.

Source: 2009 AFP, Agence France-Presse (AFP)

[Russia delivers another batch of naval fighters to India](#)

Russia's MiG aircraft maker delivered a new batch of five MiG-29K/KUB carrier-based fighters to the Indian navy in May, the company said. "A flight training simulator and other technical equipment has also been delivered," MiG said in a statement on Monday. The two countries signed a contract stipulating the supply of 12 single-seat MiG-29Ks and four two-seat MiG-29KUBs to India in January 2004. The contract is part of a \$1.5-billion deal to deliver the Admiral Gorshkov aircraft carrier, currently being retrofitted in Russia for the Indian Navy. India's first four MiG-29Ks and MiG-29KUBs officially entered service in February 2010. In March 2010, Russia and India signed a \$1.5-billion contract on the supplies of 29 additional MiG-29K Fulcrum-D carrier-based fighter jets to New Delhi. The start of the supplies is scheduled for 2012. The contracts for the jets also stipulate pilot training and

aircraft maintenance, including the delivery of flight simulators and interactive ground and sea-based training systems. The Indian Navy has named its MiG-29K squadron the "Black Panthers." The fighters will be based at an airfield in the state of Goa on India's west coast until the Admiral Gorshkov joins the Navy under the name of INS Vikramaditya in early 2013. The Vikramaditya is expected to carry up to 24 MiG-29K/KUB fighters. The future indigenous aircraft carrier Vikrant being built by India may also carry these aircraft.

Source: RIA Novosti

Russia joins NATO in submarine rescue drills

MOSCOW, May 31 (RIA Novosti) - A task force from the Russian Black Sea Fleet, led by diesel submarine Alrosa, is taking part in NATO naval drills off the coast of Spain, the Russian Defense Ministry said. Bold Monarch is the world's largest submarine rescue exercise held every three years. This year's exercise is conducted on May 30-June 10 near the Spanish port of Cartagena, and involves submarines, ships and aircraft from both NATO and non-NATO countries, including Russia. "The Russian task force comprises diesel submarine Alrosa, salvage tug Shakhtyor, auxiliary vessel KIL-158, and rescue vessel Epron," a Russian Defense Ministry's spokesman said on Monday. This is the first time a Russian submarine has participated in any NATO exercise. Alrosa, a Kilo class submarine, will play a part of a "vessel in distress", bottomed at the sea floor. Ships equipped with a range of sophisticated debris clearance, diver assisted gear and submarine rescue vehicles will attempt to salvage the sub and rescue its crew. Russian auxiliary vessel KIL-158 carries an advanced Seaeye Panther Plus underwater remotely operated vehicle (ROV), the spokesman said. Panther Plus was adopted by the Russian Navy after an incident with Russian submariners in the Bering Sea in August 2005, when Russia's AS-28 submersible became tangled in a fishing net at a depth of about 190 meters (about 620 feet). The ROV can operate at depths up to 1,000 meters (3,000 feet).

Source: RIA Novosti

Turkmenistan creates own space agency

ASHGABAT (Turkmenistan), May 31 (RIA Novosti) - Turkmen President Gurbanguly Berdymukhamedov has signed a decree authorizing the creation of a National Space Agency, national television reported. The document, signed on Monday, stipulates that the agency is being set up "to ensure the implementation of scientific achievements in the national economy and to supervise future space exploration." Berdymukhamedov said in the past that the presence of own national satellite would boost the development of the country's communications network, Internet and television, contribute to the implementation of ecological programs, improve the exploration of energy resources, as well as ensure the

successful implementation of various state programs. Turkmenistan has reportedly been holding talks with potential partners to acquire its first telecommunications satellite. At present, a Russian Yamal-type satellite owned by Gazprom Space Systems provides telecommunications coverage for the former Soviet state in Central Asia.

Source: RIA Novosti

China Southern Airlines to buy six Boeing B777Fs

China Southern Airlines, one of China's major carriers, said Tuesday it has agreed to buy six Boeing 777 freighters, to be delivered between 2013 and 2015, to boost its cargo business.

The carrier said the purchase for the six aircraft, with a list price of \$1.58 billion and to be funded by bank loans and from its operating fund, is "consistent with the (airline's) development strategy" and its aircraft fleet structure plan.

"The acquisition will facilitate the optimisation of the structure of the group's cargo business, freighter fleet and cargo traffic capacity," the firm said in a statement to the Hong Kong stock exchange.

Source: 2009 AFP, Agence France-Presse (AFP)