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Republic of Korea: Defence Budget and Reform Program



Ministry of National Defense
Republic of Korea

The Republic of Korea is deliberately trying to raise the efficiency of national defense organization and management so as to match the

standards of the changing security environment and future warfare requirements. Additionally, the country seeks to transform itself into an information and technology intensive military structure and raise the efficiency of national defense organization and management to match the standards of the changing security environment and future warfare requirements. In order to achieve this, a significant amount of funds have been allocated. Under this concept the total sum of military spending is expected to rise to 37,456 billion KRW (\$35.0 billion) in 2015 from 35,706 billion that it was in 2014.

	2011	2012	2013	2014	2015
Defense budget (billion \$)	31,403(\$27.3)	32,958(30.8\$)	34,345(30.4\$)	35,706(31.9\$)	37,456(35.0\$)
Increase (%)	6.2	5	4.2	3.5	4.9
Percentage of GDP	2.36	2.39	2.40	2.38	2.35

Source: Republic of Korea Ministry of National Defence

From the 37,456 billion KRW, 70.6% is allocated to maintenance programs and the remaining 29.4% to improvement programs. More analytically 36.1% of the maintenance programs will be allocated to personnel expenses, 5.5% to food and clothing, 1.4% to defence informatization, 0.7% to service members welfare, 12.6% to logistics support, 1.3% to training and education, 7% to installation and construction and 5.9% to other categories.

Additionally, it is worth mentioning that Republic of Korea is changing its personnel structure, making it a cadre-based military while gradually downsizing the troop's number. This process has already started as military personnel decreased by 26,000 between the period 2005 and 2009. The total military personnel were 681,000 in 2005. From these 548,000 served in the army, 41,000 served in the navy, 27,000 in Marine Corps and 65,000 to the air force. In 2009 this number was reduced to 655,000. The 26,000 personnel were reduced from the army while the personnel of the other branches of the armed forces (navy, marine corps and air force) remained the same.

Year	Total	Army	Navy	Marine Corps	Air Force
2005	681	548	41	27	65
2009	655	522	41	27	65
2020	517	387.2	41	23.8	65
Difference	-164	-160.8	0	-3.2	0

Source: Republic of Korea Ministry of National Defence

The projection for 2020 is that this number will further diminish to 517,000. Once again the army will mainly absorb this reduction as the total number of personnel will be reduced from 522,000 that it was in 2009 to 387.2 in 2020. The only other branch that will have its personnel cut is the marine corps (27,000 in 2009, 23.800 in 2020).

Kyriazis Vasileios,
Epicos Newsletter Head Editor

Republic of Korea awarded Raytheon a \$769.4 million contract to upgrade Patriot Air and Missile Defence System



Raytheon

The Republic of Korea is in the process of upgrading its Air and Missile Defence and in order to achieve this has among others awarded Raytheon Company a \$769.4 million Direct Commercial Sale contract to upgrade an undisclosed quantity of Patriot Air and Missile Defence System batteries. Mr. Dan Crowley, President of Raytheon Integrated Defense Systems stated that: "The upgrade enhances the Republic of Korea's defenses and underscores the value of the 13-nation strong Patriot partnership which funded development of the modernization. The Republic of Korea's procurement is also an economic growth engine which will bring good jobs to Korea and preserve jobs in the U.S which would have gone overseas if a foreign system was selected."

The upgrades include:

- Open architecture, which ensures Patriot, can operate on a variety of networks.
- Modern Man Station, a new operator interface featuring touch screen technology and color graphical displays.
- Radar Digital Processor, which improves target detection and identification, enhances surveillance, and supports the PAC-3 MSE missile.

Patriot is the world's most modern and capable air and missile defense system, providing protection against a full range of advanced threats, including aircraft, tactical ballistic missiles, cruise missiles and unmanned aerial vehicles. Continually upgraded and enhanced to reflect the latest technology, Patriot is the system of choice for 13 nations around the globe.

The country's authorities are deliberately trying to enhance the armed forces and in order to achieve this, a significant amount of funds are allocated in improving their capabilities. This is highlighted by the contract awarded to Raytheon.

Kyriazis Vasileios,
Epicos Newsletter Head Editor

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 prototyping of wrist-top/wearable computer for specialized Future Soldier applications



A leading technology provider, designer and manufacturer of hands-free communication solutions for demanding use, is proposing the design and prototyping of a unique and energy efficient wrist-top/wearable computer that can be used in several Future Soldier (FS) applications.

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

Mail at: g-menexis@epicos.com

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.

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Mail at: g-menexis@epicos.com



Embraer Sells up to 34 Additional E-Jets to Air France/KLM Group



Embraer announced today a firm order for 15 E175s and two E190s from KLM Cityhopper, KLM's regional subsidiary. The contract for the 17 E-Jets also includes an option for 17 additional E-Jets for KLM Cityhopper or Air France regional subsidiary HOP! The firm order, which will be included in Embraer's 2015 first-quarter backlog, has an estimated value of USD 764 million based on Embraer's current list prices. The transaction is valued at USD 1.5 billion, if all options are exercised. Both the E190s and the E175s will be configured in single-class layouts. They will join the 28 E190s already flying with KLM Cityhopper to replace the remaining 19 Fokker F70s that the carrier is phasing out.

"KLM Cityhopper's decision to acquire more E-Jets is a tremendous endorsement and confirmation that the E-Jets are the most efficient, comfortable and the lowest operating cost aircraft in the segment from 80 to 110 passengers," said Paulo Cesar Silva, President & CEO, Embraer Commercial Aviation.

The delivery of the first E190 is scheduled to occur by year-end. The first E175 will join KLM Cityhopper's fleet in the first semester of 2016. The Air France/KLM group started the process of replacing the Fokker 100 for E-Jets in Regional/Air France and KLM Cityhopper in 2008, in order to enhance the existing network and to permit the development of new routes. When the last aircraft from this order is delivered, Air France/KLM group will have 71 E-Jets, the largest E-Jet fleet in Europe.

"Purchasing these seventeen Embraers and taking out an option to order an additional seventeen in the future, represents a giant stride for KLM in terms of fleet renewal. KLM continues to invest in its fleet and product in order to offer passengers the best, as well as reaffirming KLM and KLM Cityhopper's commitment to our customers," said KLM President & CEO Pieter Elbers.

"This strategic decision ties in with KLM Cityhopper's policy of ongoing innovation. The new fleet will contribute even more towards optimal operations, serving the seven million passengers who fly with KLM Cityhopper each year," said Managing Director KLM Cityhopper Boet Kreiken. KLM Cityhopper was recently awarded by the Air Transport News magazine as Regional Airline of the Year 2015.

The E175s feature a new wingtip that, among other technical enhancements, improves aerodynamic performance. Fuel consumption on a typical flight is 6.4% lower than the original E175. The reduction makes the operating economics of today's E175s comparable to large-capacity turboprops and presents new opportunities for the E175.

Since entering revenue service in 2004, Embraer has received more than 1,560 orders for its family of E-Jets. The aircraft have been added to the fleets of 65 customers in 45 countries.

More than 1,100 E-Jets have been delivered. The versatile 70 to 130-seat family is flying with low-cost airlines and with regional and mainline carriers.

About KLM Cityhopper

KLM Cityhopper operates around 300 flights a day for KLM. These flights all serve cities within Europe, 54 of which are essentially business destinations. Each day, around 18,000 passengers choose to fly with KLM Cityhopper. KLM Cityhopper was recently rated Regional Airline of the Year 2015 by an international panel of professional judges.

For Further Information [Click Here](#)

Saab Receives Follow-on Orders for Self-protection Systems for the Indian Dhruv Helicopter



Defence and security company Saab has received follow-on orders from Hindustan Aeronautic Limited (HAL), India, for serial production of an integrated electronic warfare self-protection system for installation on the Indian Army's and Air Force's

Advanced Light Helicopter Dhruv. The orders have a total value of approximately USD78 million (SEK740 million).

Saab's Integrated Defensive Aids Suite (IDAS) protects crew by enhancing platform survivability in sophisticated, diverse and dense threat environments. The system provides timely warning against radar, laser and IR guided threats and automatically deploys the appropriate countermeasures.

"The success of IDAS continues and we are proud that HAL and the Indian Armed Forces have continued faith in the IDAS system, of which this follow-on orders is a clear indication. It is a testimony of the effectiveness and reliability of the IDAS solution", says Micael Johansson, head of Saab business area Electronic Defence Systems.

"With these follow-on orders we continue to build on our very successful partnership with HAL and further establish Saab as a local partner to the Indian industry and as a supplier of high tech products and systems to the Indian Armed Forces", says Lars-Olof Lindgren, head of Saab market area India.

Production of the IDAS system will take place at Saab in Centurion, South Africa (Saab Grintek Defence). Deliveries will take place during the years 2015 to 2018.

In addition to the production orders received, Saab also received orders for IDAS ground support and test equipment for the Advanced Light Helicopter program. The system has a long and successful history with proven capability on many airborne platforms such as the Saab 2000, Agusta-Westland A109, Super Lynx 300, Boeing CH-47 Chinook, Denel Rooivalk

and Oryx, Eurocopter Cougar, Puma & Super Puma, NH Industries NH90, C-130 and L100 Hercules, Sukhoi Su-30MKM. Deliveries are ongoing for the HAL Advanced Light Helicopter Dhruv.

For further information, please contact:

Saab Press Centre,

+46 (0)734 180 018,

pressc...@saabgroup.com

www.saabgroup.com

www.saabgroup.com/YouTube

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Saab serves the global market with world-leading products, services and solutions within military defence and civil security. Saab has operations and employees on all continents around the world. Through innovative, collaborative and pragmatic thinking, Saab develops, adopts and improves new technology to meet customers' changing needs.

Epicos Newsroom**BAE Systems to Expand San Diego Ship Repair Capabilities**

BAE Systems will significantly expand dry-docking capabilities at its San Diego shipyard, enhancing the ship repair, maintenance, and modernization services the company provides to the U.S. Navy, other government agencies, and commercial customers.

The investment by BAE Systems, which will include the purchase of a new dry dock and a range of infrastructure improvements at the yard, will total approximately \$100 million.

The company made the announcement during a ribbon-cutting ceremony dedicating a new pier at the shipyard along the San Diego waterfront. Attendees included U.S. Representatives Susan Davis, Duncan Hunter, and Scott Peters.

“Our primary strategy and mission in San Diego is to support the U.S. Navy and its rebalance to the Pacific,” said Erwin Bieber, president of BAE Systems’ Platforms & Services sector. “The new pier and dry dock will complement and expand the shipyard’s existing capacity in this homeport and provide greater capabilities to our customers. Our continuing investment in the region further demonstrates our commitment to San Diego and recognizes the important role it plays in our strategy.”

The new pier and dry dock will support current and future Navy surface ship repair, maintenance, and modernization, and will accommodate cruisers, destroyers, amphibious assault ships, mine countermeasures ships, and both variants of the Littoral Combat Ship. The expanded facilities may also service other ships and vessels under contract, including those for Military Sealift Command, the U.S. Coast Guard, and the U.S. Maritime Administration.

The new Pier 4, at 415-feet long and 64-feet wide, replaces a 52-year-old pier and includes new services such as fresh water, electrical, sewage, and storm water containment.

The new dry dock will measure 950-feet long and 205-feet wide, with a design lifting capacity of 55,000 tons. When operational in early 2017, it will be the company’s largest dry dock in the United States and will employ several environmental design features, including LED lighting, electric cranes, air-cooled emergency generators, a zero discharge closed-loop salt water system, and storm water recovery systems.

BAE Systems currently employs approximately 3,000 people in the region, including shipyard workers, weapons support personnel, and employees in nearby Rancho Bernardo supporting U.S. military and intelligence community customers. The new pier and dry dock are expected to increase employment opportunities at the San Diego yard.

BAE Systems is a leading provider of ship repair, maintenance, modernization, conversion, and overhaul for the Navy, other government, commercial, and private customers. The company operates seven full-service shipyards in Alabama, Florida, California, Virginia, and Hawaii, and offers a highly skilled and experienced workforce of more than 5,000 employees, eight dry docks, and significant pier space and ship support services. The company also has commercial shipbuilding and module fabrication capabilities at its Mobile, Alabama, and Jacksonville, Florida, shipyards.

Contact

John Measell
Director, Communications
Ship Repair
john.measell@baesystems.com
757-419-9615

For Further Information [Click Here](#)

Source: Epicos, BAE Systems

China Southern Airlines 2014 net profit drops 10.55%

China Southern Airlines' net profit dropped 10.55 percent year-on-year in 2014, hit by slowing growth in the Chinese economy and global aviation accidents, it said.

Net profit for 2014 was 1.78 billion yuan (\$292 million), down from 1.99 billion yuan in 2013, the company said late Monday in a statement to the Hong Kong stock exchange, where it is listed.

The airline, one of China's "Big Three" carriers, said aviation accidents overseas had hurt air travel demand and also cited competition at home.

China's economy expanded an annual 7.4 percent last year, the slowest in nearly a quarter of a century.

Fast-growing budget airlines and an expanding high-speed rail network in China have posed challenges for established players such as China Southern Airlines, analysts say.

Still, the airline carried 101 million passengers last year, up 9.9 percent from 2013, the statement said, adding that operating revenue for 2014 rose 10.18 percent to 108.58 billion yuan.

"Looking ahead to 2015... (the) domestic economy will remain stable, but with higher downward pressure. It will be difficult for the entire industry to sustain continuous rapid growth," the airline said.

On Tuesday afternoon, China Southern shares were down 0.19 percent in Hong Kong and 3.78 percent lower in Shanghai, where it is also listed.

China Southern Airlines performed worse last year than some competitors. Air China said last week that net profit rose 14 percent to 3.78 billion yuan in 2014, while China Eastern Airlines also said last week net profit rose 44 percent to 3.4 billion yuan.

Source: 2015 AFP, Agence France-Presse (AFP)

S. Korea opts for KAI-Lockheed in \$7.8 bn fighter deal

South Korea on Monday selected Korea Aerospace Industries (KAI) and partner Lockheed Martin for a multi-billion-dollar contract to develop 120 "indigenous" fighter jets to replace Seoul's ageing fleet.

The bid from KAI and the US aerospace giant, which is subject to a screening process before being officially approved, was always seen as the favourite for the 8.6 trillion won (\$7.8 billion) deal over a rival bid by civilian carrier Korean Air (KAL) teamed with Airbus.

The Defence Ministry also approved a separate \$1.28 billion deal to buy Patriot PAC-3 missiles and upgrade its air defence system aimed at intercepting North Korean ballistic missiles. The KF-X fighter project is designed to develop and produce 120 fighter jets of a new, indigenous type to replace South Korea's ageing fleet of F-4s and F-5s.

"We have chosen KAI as the preferred bidder based on our review of... cost, development plans and development capabilities of the two bidders," the Defense Acquisition Program Administration (DAPA) said in a statement. "We are planning to sign the (final) contract during the first half of this year after negotiating with the preferred bidder over technology... and the price," it said.

The South Korean government is to provide 60 percent of the development costs, with the rest to be shared by the winning consortium and Indonesia, whose involvement is the result of a bilateral defence treaty.

The KAI-Lockheed alliance always had the upper hand, as the same partnership developed the T-50 trainer, which is South Korea's first homegrown supersonic aircraft. Lockheed, which won a contract in 2013 to sell 40 F-35A joint strike fighters to South Korea, has promised to transfer key technologies for the KF-X project to Seoul. South Korea's military procurement needs, especially where the air force is concerned, have overwhelmingly been met by US suppliers in the past -- a reflection of their close military alliance.

KAL had talked up its bid by highlighting the technical support available from Airbus, which is part of the European consortium that developed the Eurofighter.

Airbus has made a number of bids for the South's military contracts, including a \$1.38 billion deal to provide air refuelling tankers.

The defence ministry's request for the KF-X project required a new design, although experts say a heavily modified version of an existing fighter model would also be acceptable. DAPA officials said South Korea would also buy an unspecified number of "hit-and-kill" PAC-3 missiles from Lockheed Martin by 2020 to improve its anti-ballistic missile capabilities.

US defence contractor Raytheon has been selected to upgrade South Korea's PAC-2 fire control system to launch both PAC-2 and PAC-3 missile, DAPA spokesman Kim Si-Cheol told reporters.

Source: 2015 AFP, Agence France-Presse (AFP)

Estonia and Raytheon Agree to Pursue Long-term Collaboration in Cybersecurity

The Estonian Ministry of Defense and Raytheon Company (NYSE: RTN) have agreed to explore long-term collaboration in the area of cyber security.

Mikk Marran, Permanent Secretary of the Estonian Ministry of Defense, and Raytheon agreed on the collaborative arrangement during Marran's recent visit to Washington for talks with U.S. government and U.S. defense industry representatives on issues of bilateral defense cooperation. "Strong defense-industrial cooperation between the United States and Estonia is in our country's strategic interest," Marran added. "Raytheon is one of the most prominent global defense and aerospace companies, with expertise in providing integrated defense systems and state-of-the-art cyber security solutions. It's our privilege to collaborate with Raytheon Company."

"Raytheon has developed a very strong portfolio of national-scale cyber defense solutions that complement the investments and innovations made by Estonia in securing the cyber domain for its people," said David C. Wajsgas, President of Raytheon Intelligence, Information and Services. "This collaboration will explore important new solutions within the critical domain of national cyber security."

Tom Vecchiolla, President of Raytheon International, Inc. met with Marran to discuss the collaborative arrangement. Afterwards, he commented that, "Combining Estonia's world class information technology infrastructure with Raytheon's cyber security expertise will result in new opportunities to address the most challenging cyber threats on a global scale. We anticipate significant and synergistic benefits through this unique collaboration."

Representatives from Estonia's Ministry of Defense and Raytheon will meet in Tallinn to further define specific areas for cooperation. Initial efforts will focus on advancing industry partnerships and pursuing collaborative initiatives for further enhancing cyber defense capabilities for Estonia, Raytheon and others that seek advice and assistance.

Estonia, a country of 1.3 million people and a member of the European Union and NATO, is a global pioneer in digital society, e-governance, and cyber security solutions. Estonia ranks second on the Freedom House Internet freedom index and fifth on the International Telecommunication Union's Global Cybersecurity Index.

Estonia is a strong NATO ally, spending more than 2 percent of GDP on defense and contributing troops for international operations in Afghanistan, Iraq, the Middle East, Africa and Western Balkans. For more information about the Estonian Ministry of Defense, visit www.mod.gov.ee

About Raytheon

Raytheon Company, with 2014 sales of \$23 billion and 61,000 employees worldwide, is a technology and innovation leader specializing in defense, security and civil markets throughout the world. With a history of innovation spanning 93 years, Raytheon provides state-of-the-art electronics, mission systems integration and other capabilities in the areas of sensing; effects; and command, control, communications and intelligence systems, as well as cyber security and a broad range of mission support services. Raytheon is headquartered

in Waltham, Mass. For more about Raytheon, visit www.raytheon.com and follow on Twitter @raytheon.

Media Contacts

Jason Kello

+1.571.250.1428

iispr@raytheon.com

Source: Epicos, Raytheon

US Air Force awards Raytheon \$91.5 million for MALD-J

Raytheon Company received a \$91.5 million U.S. Air Force contract modification award for the Miniature Air Launched Decoy Jammer (MALD-J) missile. The contract modification is for Lot 8.

Work will be performed in Tucson and is expected to be complete by June 2017. This award was booked in the first quarter 2015.

About MALD and MALD-J

MALD® is a state-of-the-art, low-cost expendable flight vehicle that is modular, air-launched and programmable. It weighs fewer than 300 pounds and has a range of approximately 500 nautical miles. MALD-J adds radar-jamming capability to the basic MALD platform.

- MALD confuses enemy air defenses by duplicating friendly aircraft flight profiles and radar signatures.
- MALD-J maintains all capabilities of MALD and adds jamming capabilities.
- Raytheon began delivery of MALD-Js in the fall of 2012.

About Raytheon

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Media Contacts

Ashley Mehl

+1.520.794.5142

rmspr@raytheon.com

Source: Epicos, Raytheon