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# South Korea: Current & Future Defence Budget

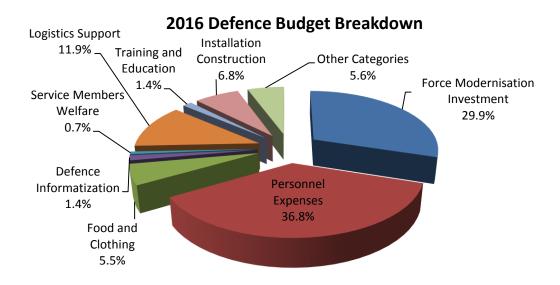




According to official data released by the South Korean Ministry of National Defence, in 2017, the country's defence budget is expected to reach 40.33 trillion South Korean Won – KRW-(approximately 36.5 billion US dollars), increased by some 4% compared to the previous year (38.8)

trillion KRW or 34 billion US dollars) and surpassing the 40 trillion Won mark, for the first time. This increase, is largely attributed to the military threat posed by North Korea, the strengthening of military power of neighbouring countries in Northeast Asia and the changes in the security and military environment of the region. The lion's share of the budget increase falls on plans to deploy the Korean Air and Missile Defence (KAMD) system. According to the 2017 defence budget, 533.1 billion KRW (about 456 million US dollars) will be allocated to the KAMD project, an increase of 40.5% compared to the 2016 budget in which 379.5 billion KRW (325 million US dollars) were allocated for the specific program. The KAMD system is currently capable of intercepting North Korean ballistic missiles in their terminal stage and its core weapons system consists of medium- and long-range surface-to-air missiles, Patriot missiles, and an early warning radar. The plans are for the KAMD construction project to be completed by the mid-2020s.

Further, the 2017 budget foresees 28.17 trillion KRW (equivalent to 69.8% of total defence expenditure) for operating and personnel expenses and 12.16 trillion KRW (30.2%) for the enactment of defence modernisation programs. The same pattern was evident in the 2016 budget, were 70.1% of the total Defence expenditure was allocated to 'force maintenance' programs and the remaining 29.9% to 'force modernization' programs. More analytically, 36.8% of the 'force maintenance' programs were allocated to personnel expenses, 5.5% to food and clothing, 1.4% to defence informatization, 0.7% to service members welfare, 11.9% to logistics support, 1.4% to training and education, 6.8% to installation construction and 5.6% to other categories.



Source: http://www.mnd.go.kr/

As was already indicated, the lion's share of the 2017 budget increase, falls on plans to deploy the KAMD system. South Korea traditionally spends a considerable amount of funds in upgrading its Air and Missile Defences. Under this context, in 2015, the country's authorities awarded Raytheon a \$769.4 million Direct Commercial Sale contract to upgrade an undisclosed quantity of Patriot Air and Missile Defence System batteries to the latest version. Mr. Dan Crowley, President of Raytheon Integrated Defense Systems stated that: "The upgrade enhances the Republic of Korea's defences 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 US which would have gone overseas if a foreign system was selected."

Apart from the KADM program, South Korea, is planning to carry out a series of other major acquisition programs. More specifically, during the 2015-2019 period, the country is going to modernise several aspects of its land forces. Among other items, South Korea aims to enhance their surveillance, reconnaissance, and command and control capabilities, as well as their manoeuvre and precision strike capabilities. Regarding the country's naval forces, it is expected that efforts will be invested in strengthening their capabilities as far as protecting sea lines of communication (SLOC). Additionally, capabilities for enabling amphibious operations will be acquired.

Regarding the country's air force, the largest modernisation program on the cards, is that of the F-16s upgrade. Within this frame, in November 2016, Lockheed Martin was awarded a 1.2 billion US dollars contract, to upgrade 134 Korean F-16 aircraft to the F-16V configuration. Among the enhancements to be introduced, are an Active Electronically Scanned Array (AESA) radar, a modern commercial off-the-shelf (COTS)-based avionics subsystem, a large-format, high-resolution centre pedestal display and a high-volume and high-speed data bus.

Overall, the Korean Army is in a process of restructuring. The intention of the country's authorities is to establish a more efficient military command system, that will allow the national Armed Forces to take initiative in terms of war planning and to set up a more coherent military cooperative scheme for Korean-US combined operations. Additionally, the troops' structure is to be changed, creating a cadre-based military. This will create a shift to a technology-intensive structure, supported mainly by officers and non-commissioned officers (NCOs).

Additionally, troop's numbers are to be downsized. This process has already started, as military personnel decreased by 26,000, over the period 2005-2009. Total military personnel back in 2005, amount to some 681,000. Of these, 548,000 served in the Army, 41,000 served in the Navy, 27,000 in Marine Corps and 65,000 in the Air Force. In 2009, this number was reduced to 655,000 overall. The 26,000 personnel reduction came from the ranks of the Army, while the personnel of the other branches of the Armed Forces (i.e. Navy, Marine Corps, Air Force), remained the same.

The projection for 2020 is that the overall number will be further reduced to some 517,000 staff. Once again the Army will absorb this reduction, as the total number of its personnel

will be reduced from 522,000 (2009) to 387.2 thousand in 2020. The only other branch that will see a cut in its personnel, is the Marine Corps (from 27,000 in 2009, to 23.8 thousands in 2020).

Furthermore, the responsible authorities of the country are aiming to enhance international cooperation with foreign countries, in the field of defence. To this end, in September of 2010, during the Indian Defence Minister's visit to South Korea, MoUs (Memorandum of Understanding) on Defence Cooperation, as also on R&D cooperation between the Korean Defence Acquisition Program Administration (DAPA) and India's Defence Research and Development Organization (DRDO) were signed.

Later, in February 2012, the Chief of the Acquisition Planning Office of DAPA, and his counterpart, the Chief Controller of the DRDO, exchanged opinions at the S. Korea-India Cooperative Defence Research and Development Committee. The agenda of the meeting dealt mainly with joint development projects and pending issues about technology cooperation. Furthermore, the Indian delegation visited the Korean Agency for Defence Development (ADD), a core think tank for Korean-designed weapons development, and several major Korean defence industries, including Samsung Techwin.

During the visit, a DAPA official stated the following: "we will take this cooperation committee as a good opportunity to continue doing S. Korea-India joint research and development, furthermore, through such a successful collaboration of the two sides on defence technology development, we are expected to cut the research and development budget, shorten the development duration, and by so doing, further promote the export of military supplies by co-producing them and creating new markets. As a result, the committee is anticipated to play a role as the hub of the joint research and development in the Asian region."

Kyriazis Vasileios, Epicos Newsletter Head Editor

## South Korea: Defence Industry

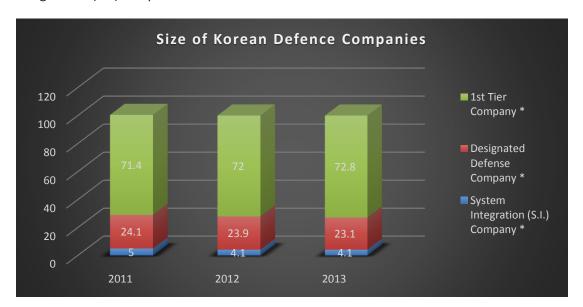




South Korea's Aerospace and Defence (A&D) industry has a wide span of technological competencies and a broad portfolio of associated

products. Korean authorities have heavily relied on the country's large industrial entities for the development of the domestic defence industry. Amongst them, Doosan Corporation Mottrol manufactures electro-hydraulic and drive systems for armoured personnel carriers (APCs) and Main Battle Tanks (MBT), as well as naval and aerospace assets; Hyundai Rotem produces state-of-the-art ground weapon systems, such as Main Battle Tanks (MBT) and Infantry Fighting Vehicles (IFVs); LIG Nex1 offers NCW (Network Centric Warfare) products, precise guided munitions, surveillance and reconnaissance as well as other weapon systems; Hanwha Techwin has capabilities in the manufacturing ,as well as in the Repair and Overhaul (R&O) of gas turbines installed in aircraft fighters, helicopters and marine vessels and in the development of artillery systems; Hyundai Heavy Industries has the technology to design and build submarines and naval vessels of various hull sizes and forms and finally Korea Aerospace Industries (KAI) develops, manufactures and maintains, advanced fixed wing and rotorcraft aircraft, UAVs and even space destined vehicles/satellites.

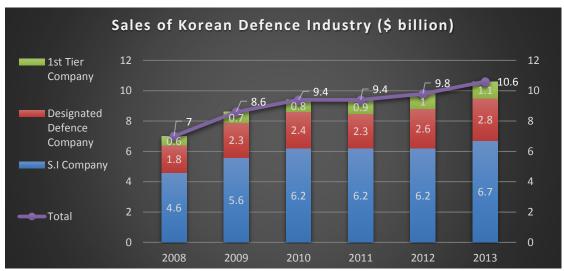
According to a report prepared by the Korean Institute for Industrial Economics and Trade (KIET), the vast majority of Korean defence companies, are 1<sup>st</sup> Tier companies, whereas only a relatively small proportion, varying from 5% in 2011, to 4.1% in 2013, were "System Integration" (S.I.) companies.



Туре	Definition
*System	Large defence company that mainly produces weapon systems registered with the
Integration (S.I.)	Government, Defence Acquisition Program Administration (DAPA)
Company	
*Designated	Defence company that mainly produces components registered with the Government,
Defence	Defence Acquisition Program Administration (DAPA)
Company	
*1st Tier	Small and Medium Enterprises that mainly produce associated parts, as a 1st Tier
Company	supplier to Designated Defence Companies and 2 <sup>nd</sup> Tier supplier to S.I. companies

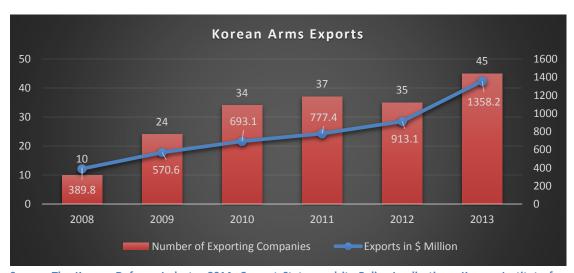
Source: The Korean Defence Industry 2014: Current Status and its Policy Implications, Korean Institute for Industrial Economics and Trade

The sales of the Korean defence industry totalled \$10.6 billion in 2013, an 8.2% increase compared to 2012. Defence S.I. companies accounted for 63.1% (\$6.7 bn) of the total related sales, while Designated Defence companies and 1<sup>st</sup> Tier companies combined, generated a total of \$3.9 bn in revenues from associated sales (36.9%). By type of weapon system, artillery's sales in 2013 ranked highest with \$3.2 billion (30%). Military aircraft and military vehicles ranked 2<sup>nd</sup> and 3<sup>rd</sup>, with \$2.3 billion (22%) and \$2.0 billion (19%), respectively.



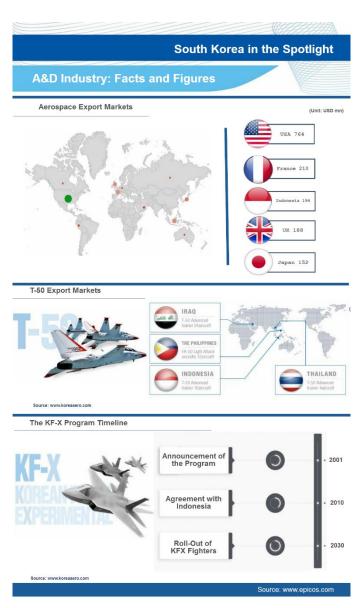
Source: The Korean Defence Industry 2014: Current Status and its Policy Implications, Korean Institute for Industrial Economics and Trade

Regarding exports, the Korean defence industry, in 2013, recorded total orders worth some \$1.36 billion, increased by 3.5 times, when compared to the amount of \$0.39 billion, recorded in 2008. Additionally, it is worth noting that 45 Korean companies exported defence equipment in 2013. Moreover, the arms export ratio, as a % of total sales, reached the 12.8% mark. Military aircraft were the predominant area of associated exports in 2013, with a total value of \$660 US m. (or 48.5% of total exports). The 2<sup>nd</sup> most important export direction was that of artillery equipment, with \$413 million (30.4% of total exports), whereas the 3<sup>rd</sup> most important direction was that of military vehicles, with \$184 million (13.5% of total exports).



Source: The Korean Defence Industry 2014: Current Status and its Policy Implications, Korean Institute for Industrial Economics and Trade

In 2013, the total amount invested by arms manufacturers in the Republic of Korea, was



**Pikto**chart

\$548 million, an increase of 28.1% compared to 2012. Moreover, the amount invested in R&D and equipment was \$235 million and \$313 million respectively.

Regarding the total number of employees engaged in the domestic defence sector, these amounted to 33,162 in 2013, an increase of 5.6%, compared to the previous year. Finally, R&D personnel at 24.2%, constituted a notably high proportion of the total staff employed in the Korean defence industry, while production personnel amounted to 50.5% and support personnel to 25.3%.

On the other hand, the Korean aerospace industry, employed 11,100 people and recorded a total production of 3.6 billion US dollars in 2013, increased by 34% compared to the previous year. Growth was mainly fuelled by the growing exports of civil aircraft parts to Boeing and Airbus and the increased

production of KAIs T-50 aircraft. More on that, exports reached their highest level in 2013, recording a three-year Compound Annual Growth Rate (CAGR) of 19.5%. The associated main export markets were the US (46%), Europe (25%), Indonesia (12%), Japan (9%), Peru (3%) and the UAE (2%).

The local aerospace industy has the ability to develop, test and evaluate the whole spectrum of fixed and rotary wing aircraft, with perhaps the exception of advanced 5<sup>th</sup> generation stealth fighters and large commercial/passenger aircraft. Additionally, it is worth noting that the Korean aerospace sector depends heavily on the military segment, with a military to civil business ratio of around 55% to 45%.

Furthermore, it ought to be stressed that through the effective use of industrial cooperation and offset programs, the South Korean Aerospace Industry has managed over time, to develop complete new products and reach the level of competing internationally against

other leading Prime contractors. This process begun when Korea procured the first F-16s under the "Peace Bridge" program. Korean industry built forty centre fuselages for this program. Besides coproduction, offset programs resulted in the transfer of related technologies and training for Korean engineers. After the "Peace Bridge", the "Korea Fighter Program" ("Peace Bridge II") expanded on the established relationship, to develop indigenous aircraft capabilities. The first phase of the program involved the purchase of twelve F-16s, which were built at the Lockheed Martin facility in Fort Worth, Texas. The second phase of the program involved the assembly of thirty-six F-16s in Korea. The third and final phase of the initial program, involved the full production of seventy-two F-16s in Korea. As part of these programs, more than 600 Korean engineers were trained in the United States and F-16 technical data were transferred to Korea through a series of technical assistance agreements.

One of the offsets projects for the KF-16 program consisted in market assessments, feasibility studies, and preliminary design of a new advanced jet trainer. The design project was known as KTX-2. The Republic of Korea's Air Force (ROKAF) recognized the potential of such a program and gave its approval for its realization. A \$2.1 billion full-scale development program was initiated. Seventy percent (70%) of the program was borne by the Korean government, seventeen percent (17%) by Korea Aircraft Industries, and thirteen percent (13%) by Lockheed Martin. In February 2000, the program name was changed from KTX-2 to T-50, to commemorate the 50<sup>th</sup> anniversary of the ROKAF. The rollout ceremony for the first T-50 took place at KAI's plant in Sacheon in October 2001.

To date, more than 100 aircraft have been built and delivered to the ROKAF. A second variant called the FA-50 light combat aircraft is currently in production. From the beginning, the T-50 was envisioned to be exported to other countries. In 2011, this vision became a reality when Indonesia ordered sixteen aircraft, in the T-50i configuration. All Indonesian aircraft have already been delivered.

Another country that choose the T-50, is the Philippines. The Philippine Air Force procured 12 KAI TA-50 aircraft to fulfill its requirement for a light attack and lead-in fighter trainer aircraft. The Department of National Defense (DND) announced the selection of the type, in August 2012.

Furthermore, in December 2013, it was announced that Iraq signed a contract on the acquisition of 24 aircraft of the T-50IQ variant, plus additional equipment and pilot training over the next 20 years.

Finally, in September 2015, the Thai government chose the KAI T-50 for its Air Force, over the Chinese made L-15, to replace its aging L-39 Albatros trainers. Deliveries are scheduled to be completed by March 2018.

In order to further build on the aforementioned success of the local A&D industry, Korean authorities have promoted the creation of cooperative schemes with foreign partners/countries. Under this notion, South Korea in cooperation with Indonesia are currently developing an advanced multirole fighter aircraft (known as the "KF-X" program). The work load and program costs are split 80/20 between South Korea and Indonesia. The

project was first announced by South Korean President Mr. Kim Dae-Jung in March 2001, and it is expected that South Korea will begin building KF-X fighters, by the beginning of the 2030s.

Kyriazis Vasileios, Epicos Newsletter Head Editor

# Epicos "Industrial Cooperation and Offset Projects"

epicos.com 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

#### Military radio / Voice commands in noisy environment for extreme combat situation



A Research and Technology Development organization with long standing experience in the field of Electronics and Telecommunications providing turn-key solutions is proposing the development of a robust voice command recognition system for environments with high ambient noise. The system will be integrated into various Radio Communication Systems providing voice commands capability under stressed battle conditions.

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

## Provision of engineering services for the optimization of the structural design of a new **Unmanned Aerial Vehicle (UAV)**



A company providing Engineering Design Services, as well as Project Management (turn-key projects) for the aerospace and automotive market is proposing, in the frame of an offset program, cooperation with aerospace prime contractors for the provision of engineering services for a new Unmanned Aerial Vehicle's (UAV) structural design optimization.

For Further Information Contact our ICO Department

Mail at: a-kintis@epicos.com

## News from our A&D Business Network







The Düsseldorf-based tech enterprise Rheinmetall AG has won a major follow-on order from the German Bundeswehr. Under the contract, Rheinmetall will modernize ninety of the

Bundeswehr's long-serving Fuchs/Fox armoured transport vehicles, significantly enhancing their overall performance level. The order is worth around €135 million (including value added tax). Germany's Federal Office of Bundeswehr Equipment, Information Technology and In-Service Support (BAAINBw) in Koblenz awarded Rheinmetall the contract following a decision by the budget committee of the German Parliament to make the necessary funds available. Delivery of the vehicles is slated to start in 2017 and end in 2020.

In recent years Rheinmetall has already upgraded 177 Bundeswehr Fuchs/Fox vehicles to the latest 1A8 standard. Compared with previous versions, the 1A8 offers substantially greater resistance to landmines and improvised explosive devices, coupled with improved protection against ballistic threats.

The Fuchs/Fox armoured transport vehicle first entered service in the 1970s. With some 1,200 in service worldwide, it has won a well-earned reputation for dependability and off-road mobility, making it one of the most valued and versatile vehicles in the German inventory. It is currently being used in a number of international operations: MINUSMA in Mali, Resolute Support in Afghanistan and KFOR in Kosovo.

The current upgrade will significantly expand the operational scope of these vehicles, whose many variants continue to make them indispensable for current and future Bundeswehr operations. The crew will benefit from improved survivability and various new technical features.

The current order underscores once again Rheinmetall's role as a premium supplier of army equipment and one of the world's foremost producers of military vehicles, making it a trusted partner of the Bundeswehr and the armed forces of numerous nations around the globe.

The Bundeswehr has already fielded multiple variants of the 1A8, including mobile command post and armoured personnel carrier versions, a field ambulance, an EOD vehicle as well as an NBC detection variant and the Route Clearing Package (RCP) operator vehicle used for neutralizing mines and improvised explosive devices.

Additional Fuchs/Fox armoured transport vehicles will now be reconfigured for command, APC and EOD roles, with an option for Joint Fire Support Coordination Team vehicles.

This will bring the total number of 1A8 Fuchs/Fox vehicles deployed by the Bundeswehr to 267.

Among the principal modifications characterizing the Fuchs/Fox 1A8 armoured transport vehicle are:

- structural alteration of the hull;
- new seats and suspended seating in the fighting compartment to keep soldiers' feet safely off the floor of the hull;
- reinforcement of the wheel housings, doors and window mountings;
- and additional storage bins and reinforcement of the vehicle exterior.

For Further Information Click Here

## BAE Systems rolls out first Amphibious Combat Vehicle 1.1 to U.S. Marine Corps



BAE Systems rolled out the first of 16 Amphibious Combat Vehicle (ACV) 1.1 prototypes to the U.S. Marine Corps in a ceremony today at the company's York, Pennsylvania facility. BAE Systems' ACV 1.1

offering is a fully amphibious, ship-launchable and ship-recoverable 8x8 wheeled combat vehicle. "BAE Systems has a long-standing legacy of supporting the Marine Corps' amphibious mission," said John Swift, the company's director for the ACV 1.1 program. "That expertise, coupled with the hard work of our dedicated ACV team, has allowed us to deliver the first of these vehicles ahead of schedule."

BAE Systems' solution for ACV 1.1 leverages an existing platform provided by Iveco Defence Vehicles. It is highly effective at sea when compared to any other amphibious vehicle in production today, providing superior land mobility and state-of-the-art systems survivability.

"As the Marine Corps begins testing we are confident that the capabilities of these vehicles will be proven," Swift said.

The BAE Systems solution balances the Marine Corps' demands for an affordable, production-ready platform with added designs for increased force protection, water and land mobility, lethality, transportability, and survivability.

BAE Systems' ACV 1.1 is equipped with a robust 700HP engine, providing a significant power increase over the Assault Amphibious Vehicle currently operated by the Marine Corps. The vehicle excels in all-terrain mobility and has a suspended interior seat structure for 13 embarked Marines, blast protected positions for an additional crew of three, and improved survivability and force protection over currently fielded systems.

The Marine Corps awarded BAE Systems a \$103.7 million contract for the Engineering, Manufacturing, and Development (EMD) phase of the ACV 1.1 program in November 2015, one of two EMD contracts issued. During this phase, the company is producing 16 prototypes that will be tested by the Marine Corps starting in the first quarter of 2017.

BAE Systems has long been a trusted supplier to the Marine Corps across multiple domains and has more than 70 years of experience designing and building amphibious vehicles. The company is also a leading provider of combat vehicles, having produced more than 100,000 systems for customers worldwide. Iveco Defence Vehicles brings additional proven experience, having designed and built more than 30,000 multi-purpose, protected, and armored military vehicles in service today.

For Further Information Click Here

## **Epicos NewsRoom**



## **Germany Receives First Tactical Standard Airbus A400M Airlifter**

Airbus Defence and Space has delivered to the German Air Force its first A400M transport aircraft qualified for tactical operations and able to fly in areas subject to military threats.

The aircraft is the sixth A400M in German service and the first with the new capabilities in addition to the world-leading performance of all A400Ms as strategic transports. All aircraft will be retrofitted to the new standard and receive subsequent enhancements as those are certified.

Key aspects of the aircraft's latest capabilities are improvements in its self-defence systems, ability to air-drop cargo loads, and paratrooping. Additionally it can operate on unprepared runways, fly as low as 150ft above the ground, refuel other aircraft as a tanker, and safely take-off and land in extremely high temperatures.

Airbus Defence and Space A400M Programme Manager, Kurt Rossner, said: "The A400M programme has made enormous progress this year in implementing these critical capabilities on the aircraft. In addition to having twice the payload-range of the legacy transports like the C-160 and C-130 that it is replacing, it can now also operate from any runway that those older aircraft could use. There is no other aircraft in the market with the A400M's combination of tactical and strategic capabilities and it is going to transform Germany's air mobility force."

The new aircraft is fitted with a Defensive Aids Sub-System (DASS) incorporating a Missile Warning System, Radar Warning Receiver, and an Expendables Dispensing System to eject flares and radar-confusing chaff. The DASS for all A400Ms is integrated by Airbus Defence and Space at Ulm.

Military and humanitarian loads of up to 8 tonnes each, including for example 24 x 1 tonne pallets, are fully certified for air-dropping from the aircraft's ramp and further loads are being continually qualified in flight test.

Paratroops can be dropped from the ramp or side paratroop doors in sticks of up to 20, and sticks of 30 have already been successfully demonstrated with certification to follow. Flight testing continues to build the numbers next to 40 and then 58 in a single pass.

The A400M is certified to operate from grass runways and has successfully completed testing of operations from gravel and sandy soil with certification in process. Low-level flight in mountainous terrain is cleared down to 150ft above ground by day and 300ft by night under the pilot's manual control. Development of automatic low-level flight is well advanced.

The aircraft is certified to receive fuel in-flight from a tanker, and as a tactical tanker itself to refuel fighters and other large aircraft by day, with night operations demonstrated and close to certification.

In this latest configuration the A400M is certified to operate in temperatures up to 55°C at sea level, ensuring excellent "hot and high" performance at operationally challenging airfields around the world. And it is approved to take-off and fly on only three of its four powerful engines in the event of a mechanical problem or battle damage, adding to its outstanding level of operating autonomy.

About Airbus Defence and Space

Airbus Defence and Space is a division of Airbus Group formed by combining the business activities of Cassidian, Astrium and Airbus Military. The new division is Europe's number one defence and space enterprise, the second largest space business worldwide and among the top ten global defence enterprises. It employs more than 38,000 employees generating revenues of approximately €13 billion per year.

For Further Information Click Here

Source: Epicos, Airbus Defence and Space

# Government of Kuwait – Recapitalization of 218 M1A2 Tanks and Related Equipment and Support

The State Department has made a determination approving a possible Foreign Military Sale to the Government of Kuwait for recapitalization of 218 M1A2 tanks and related equipment, support, and training. The estimated cost is \$1.7 billion. The Defense Security Cooperation Agency delivered the required certification notifying Congress of this possible sale on December 12, 2016.

The Government of Kuwait has requested a possible sale in support of its recapitalization of 218 M1A2 tanks, to include two hundred and forty (240) .50 Cal M2A1 machine guns; four hundred and eighty (480) 7.62mm M240 machine guns; two hundred and forty (240) AN/VRC-92E SINCGARS radios; and one thousand and eight five (1,085) AN/PVS-7B Night Vision Goggles. Also included is the incorporation of cooling system/thermal management systems; Common Remotely Operated Weapons Station (CROWS) II – Low Profile Stabilized Weapon Stations; special armor; 120mm gun tubes; 2nd generation Forward Looking Infrared (FLIR) sights; embedded diagnostics; gunner's primary sights; Counter Sniper and Anti-Materiel Mount (CSAMM) hardware; upgrade/maintenance of engines and transmissions; depot level support; training devices; spare and repair parts; support equipment; tools and test equipment; technical data and publications; personnel training

**Special Focus: South Korea** 

Epicos 2016

and training equipment; U.S. Government and contractor engineering, technical, and logistics support services, and other related elements of logistics support. Total estimated program cost is \$1.7 billion.

This proposed sale will contribute to the foreign policy and national security of the United States by helping to improve the security of a friendly country which has been and continues to be an important force for political stability and economic progress in the Middle East.

Kuwait intends to use this equipment to recapitalize its fleet of M1A2 full track tanks in order to modernize and extend the service of the tanks. Kuwait will have no difficulty absorbing this equipment into its armed forces.

The proposed sale of this equipment and support will not alter the basic military balance in the region.

The principal contractors involved in this program are: General Dynamics Land Systems, Sterling Heights, MI; Joint Services Manufacturing Center (JSMC), Lima, OH; Konsberg Defense Systems, Alexandria, VA, and Johnstown, PA; Raytheon, McKinney, TX; Meggitt Defense Systems, Irvine, CA; Palomar, Carlsbad, CA; Northrop Grumman, West Falls Church, VA; DRS Technologies, Arlington, VA; Lockheed Martin, Bethesda, MD; Honeywell, Morristown, NJ; Miltope, Hope Hull, AL. There are no known offset agreements proposed in connect with this potential sale.

Implementation of this proposed sale is estimated to require five to seven contractors and twenty-five to thirty U.S. Government representatives to Kuwait.

There will be no adverse impact on U.S. defense readiness as a result of this proposed sale.

This notice of a potential sale is required by law and does not mean the sale has been concluded.

All questions regarding this proposed Foreign Military Sale should be directed to the State Department's Bureau of Political Military Affairs, Office of Congressional and Public Affairs, pm-cpa@state.gov.

For Further Information Click Here

**Source**: Defense Security Cooperation Agency

**Special Focus: South Korea** 

Epicos 2016

Safran signs contract to support European NH90 engines

Safran Helicopter Engines has signed a 10-year contract with NAHEMA (NATO Helicopter

Management Agency), to support RTM322-powered NH90 operated by the French Army Light Aviation (ALAT) and French Navy. This contract also covers the NH90 operated by

Belgian Army and Navy and the Royal Netherlands Armed Forces. This contract will cover

130 rotorcraft in coming years for a turnover of 180 Million Euros. It is first Safran's Global

Support Package (GSP) contract signed to support NH90 fleet.

This agreement satisfies the NAHEMA and Nations requirement for optimum availability of

engines during their search and rescue and military operations, both at home or while on

deployment.

The GSP guarantees turboshaft availability at a fixed price per engine flying hour, and

enables military operators to focus on their core activities. This close technical partnership

with the OEM provides the customer with full budget control during the contract period.

Fortunato di Marzio, NAHEMA General Manager, said: "This GSP will allow the French, the

Belgian and the Dutch NH90 operators to benefit from a very effective engine-support for their RTM322 engines, especially during their operational tasks. The contract is the result of

a very good and fruitful partnership between NAHEMA and Safran Helicopter Engines".

Franck Saudo, Safran Helicopter Engines Executive Vice President Support & Services, said:

"This contract marks a major new milestone in our partnership with NAHEMA and French,

Belgium and Dutch armed forces. We will deliver world-class services to guarantee their engine availability; thus demonstrating that the GSP model is particularly well-suited to

supporting the engine fleets of modern air forces".

**About Safran** 

Safran is a leading international high-technology group with three core businesses:

Aerospace (propulsion and equipment), Defence and Security. Operating worldwide, the Group has 70,000 employees and generated sales of 17.4 billion euros in 2015. Safran is

listed on Euronext Paris and is part of the CAC40 index, as well as the Euro Stoxx 50

European index.

Safran Helicopter Engines is the world's leading manufacturer of helicopter engines, with

more than 72,000 produced since being founded. It offers the widest range of helicopter

turboshafts in the world and has more than 2,500 customers in 155 countries.

For more information: www.safran-group.com

**Source**: Epicos, Safran

## Lithuania Strengthens Its Air Defence Capability with RBS 70 Simulators

Defence and security company Saab has received an order for RBS 70 simulators from the Lithuanian Armed Forces. Deliveries will take place during 2018. The Lithuanian Armed Forces have been an RBS 70 customer since 2004. In order to further strengthen their air defence capability, an order for simulators has been placed with Saab. Included in the contract are simulators, training services and spare parts. Saab will work together with the Lithuanian-based Baltic Institute of Advanced Technology (BPTI) on the integration of customised 3D-maps into the RBS 70 simulators, so as to visualise real operational environments for their armed forces.

"The Lithuanian Armed Forces will have a significantly improved training capability with this integration. The 3D maps developed by our local partner BPTI gives them a realistic training environment. They can then practice their deployment and engagement of targets in an exact 'virtual' replication of the real world environment that they operate in. This proves how we continuously improve our products to ensure that our customers have the best equipment on the market", says Michael Höglund, head of marketing and sales at business unit Missile Systems at Saab Business Area Dynamics.

"The Ministry of National defense continues to modernize the RBS 70 systems which are in service of the Lithuanian Armed forces. This contract with Saab will provide our soldiers with advanced simulators. These assets will reduce the training costs and allow us to maintain a high level of soldiers' readiness", says LTC Juris Gvozdas, deputy director of Weaponry and Control Systems Department. The new RBS 70 simulator will allow to train a potential missile operator to engage the most difficult targets. The PC-based simulator has a large number of flight paths, and the instructor can create any aerial threat situation with various kind of targets. The Saab portfolio of short-range, ground-based air defence missile systems includes the RBS 70 and the latest version, RBS 70 NG. The RBS 70 system has an impressive track-record with more than 1,600 launchers and over 17,000 missiles delivered to nineteen countries.

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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.

**Source**: Epicos, SAAB

**Special Focus: South Korea** 

Epicos 2016

BAE Systems rolls out first Amphibious Combat Vehicle 1.1 to U.S. Marine Corps

BAE Systems rolled out the first of 16 Amphibious Combat Vehicle (ACV) 1.1 prototypes to the U.S. Marine Corps in a ceremony today at the company's York, Pennsylvania facility.

BAE Systems' ACV 1.1 offering is a fully amphibious, ship-launchable and ship-recoverable

8x8 wheeled combat vehicle.

"BAE Systems has a long-standing legacy of supporting the Marine Corps' amphibious mission," said John Swift, the company's director for the ACV 1.1 program. "That expertise,

coupled with the hard work of our dedicated ACV team, has allowed us to deliver the first of

these vehicles ahead of schedule."

BAE Systems' solution for ACV 1.1 leverages an existing platform provided by Iveco Defence Vehicles. It is highly effective at sea when compared to any other amphibious vehicle in

production today, providing superior land mobility and state-of-the-art systems survivability.

"As the Marine Corps begins testing we are confident that the capabilities of these vehicles

will be proven," Swift said.

The BAE Systems solution balances the Marine Corps' demands for an affordable,

production-ready platform with added designs for increased force protection, water and

land mobility, lethality, transportability, and survivability.

BAE Systems' ACV 1.1 is equipped with a robust 700HP engine, providing a significant power

increase over the Assault Amphibious Vehicle currently operated by the Marine Corps. The vehicle excels in all-terrain mobility and has a suspended interior seat structure for 13

embarked Marines, blast protected positions for an additional crew of three, and improved

survivability and force protection over currently fielded systems.

The Marine Corps awarded BAE Systems a \$103.7 million contract for the Engineering,

Manufacturing, and Development (EMD) phase of the ACV 1.1 program in November 2015, one of two EMD contracts issued. During this phase, the company is producing 16

prototypes that will be tested by the Marine Corps starting in the first quarter of 2017.

BAE Systems has long been a trusted supplier to the Marine Corps across multiple domains

and has more than 70 years of experience designing and building amphibious vehicles. The

company is also a leading provider of combat vehicles, having produced more than 100,000 systems for customers worldwide. Iveco Defence Vehicles brings additional proven

experience, having designed and built more than 30,000 multi-purpose, protected, and

armored military vehicles in service today.

For Further Information Click Here

Source: Epicos, BAE Systems