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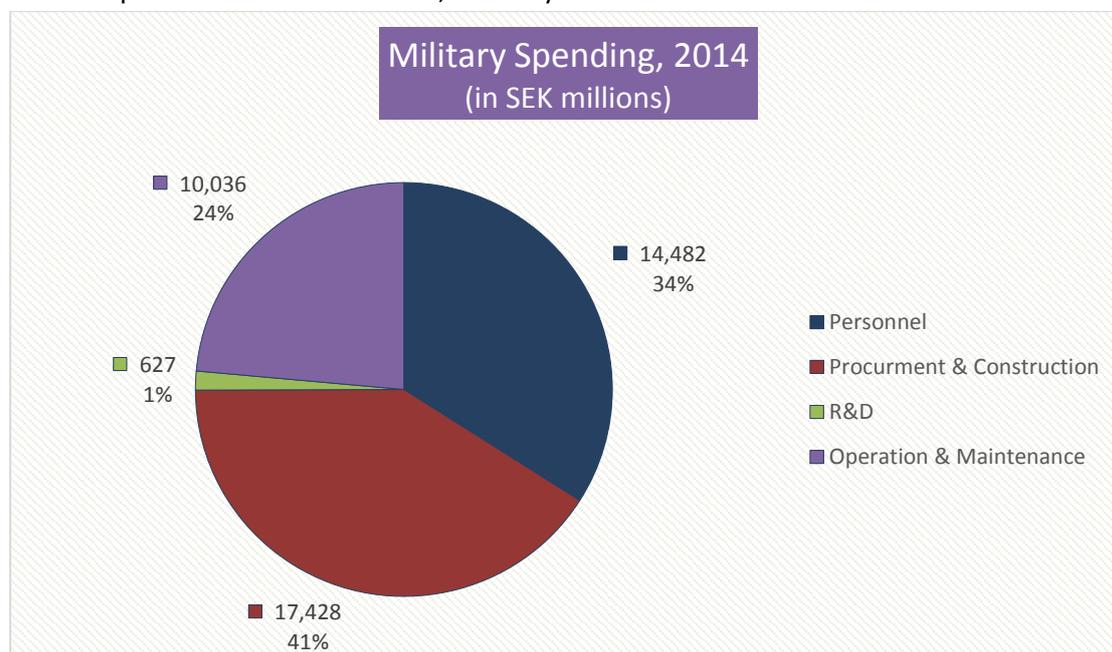
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Swedish Defence Budget and Future Procurements



The Swedish Armed forces include the Army, Navy, Airforce and the Home Guard. Since 2010, military service has turned to be gender neutral, while at the same time the conscription system was suspended, in favour of a volunteer recruiting system. However, given that in comparison to the plans of the Armed Forces, volunteers actually enlisting are much less than the associated requirements, therefore major staff shortages are predicted in the near future. Under this risk, it seems essential for the Swedish authorities to reactivate the conscription system, and promote compulsory basic training, by 2018. Hence, forming a reserve force of at least 23,000 military trained individuals was suggested by the commission -charged with performing an inquiry into manning requirements for the Armed Forces, in 2015- in its official report.

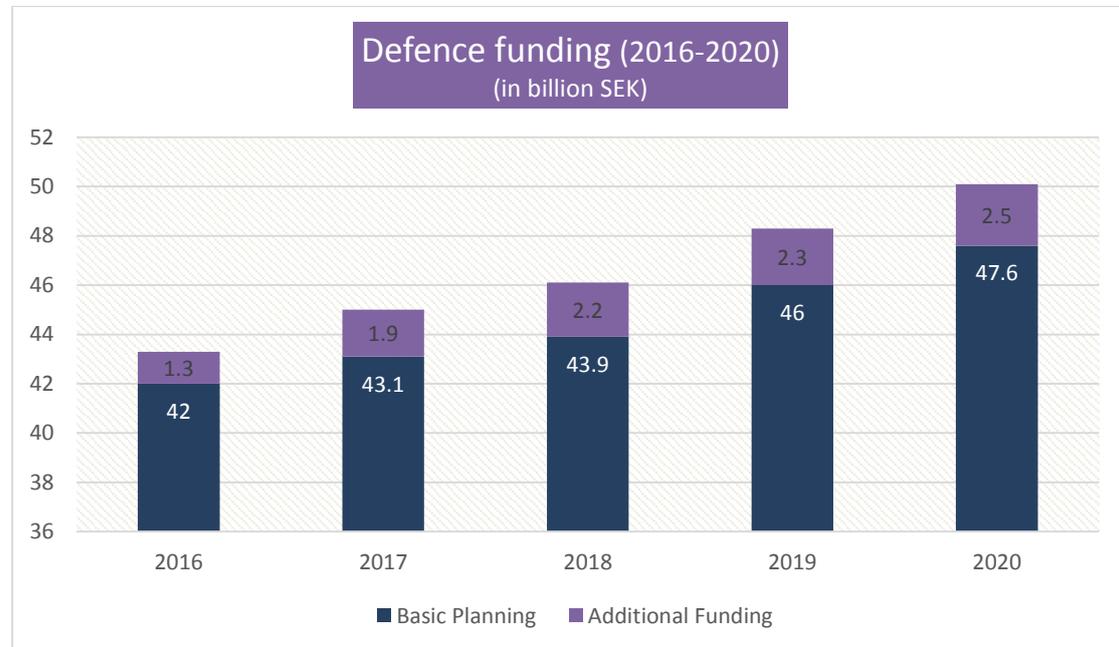
In addition, given the increase of crime and terrorism incidents in recent years, the Government has also proposed increased resources for the Swedish Police Authority, as well as the Swedish Security Service. In recent years, Swedish Defence suffered from serious cut-offs, as a result of the global economic crisis, in conjunction with the erroneous belief that EU members should not worry about terrorism and similar threats. In 2014, 41% of the country's military spending was allocated to Procurement & Construction, 34% to Personnel, 24% to Operation and Maintenance, and only 1% to R&D.



Source: <http://www.un-arm.org/Milex/CountryProfile.aspx?CountryId=186>

The nearby tension between Russia and the Ukraine over Crimea in 2014, as well as the existence of threats related to other diverse factors, such as those of climate change and terrorism, have affected the Security strategy of Sweden. After long discussions in the Swedish parliament, a raise of the Defence budget for the period 2016-2020 by 10.2 billion

kronor (US \$1.2 billion), was decided in April 2015. For the first time in more than two decades, Sweden's governance decided upon consecutive increases of the defence budget (by 2.2% per year). According to the Swedish Defence Policy for 2016-2020 (see chart below), the total defence spending for the relevant 5-year period, will be about SEK 233 billion (some US \$ 26 billion).



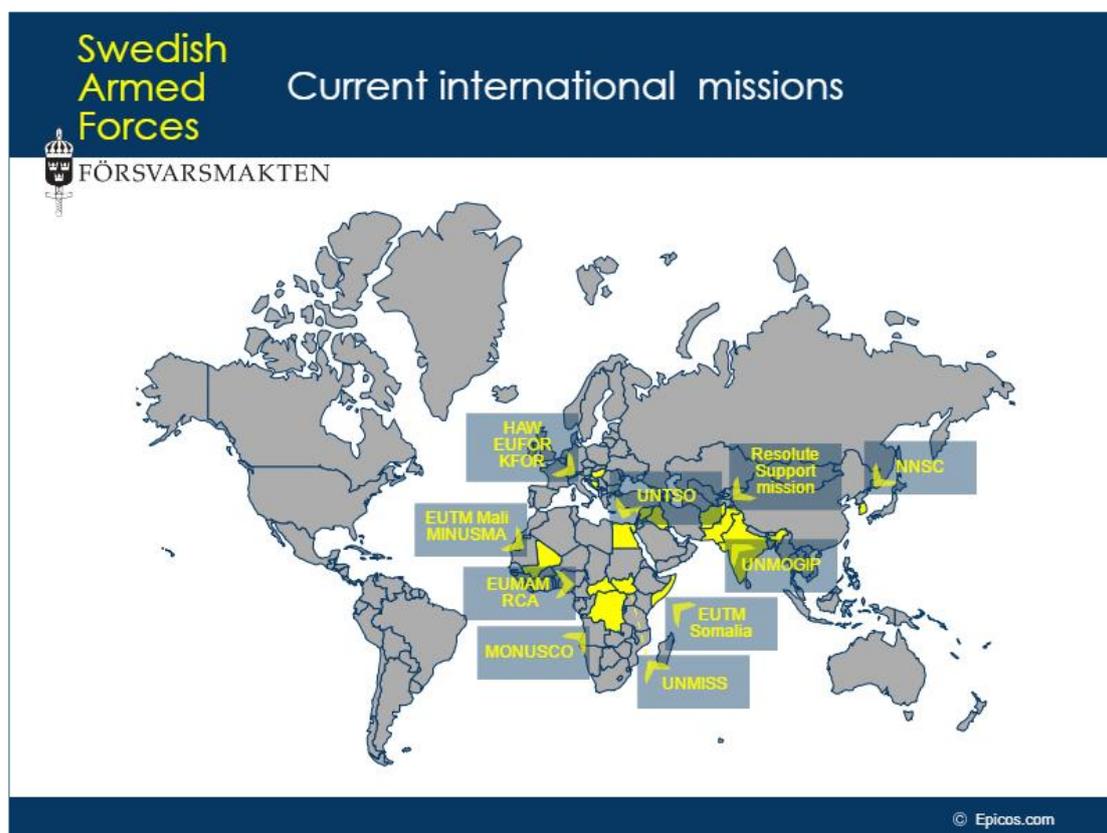
Source: <http://www.government.se/>

It is worth mentioning that Sweden is not a member of a military alliance. However, today's reality, characterised by an increased sense of unpredictability in terms of security, Sweden has actively pursued international cooperation, in order to benefit from cost sharing and interoperability initiatives. Therefore, Sweden aims to deepen its participation in the Nordic Defence and Security Cooperation (NORDEFCO), the European Defence Agency (EDA), the UN, the EU, as well as work more closely with NATO.

Under this context, Sweden is taking part in various European/EDA projects and initiatives, such as those listed below (list is not exhaustive):

- Air-to-air Refuelling (since 2012)
- Maritime Surveillance - MARSUR (since 2006)
- Software Defined Radio - SDR (since 2008)
- Project Team Personnel Recovery - PT PR (since 2007)
- Unmanned Maritime Systems (UMS) research (since 2009)
- Counter-IED (Improvised Explosive Devices) (since 2009)
- Remotely Piloted Aircraft Systems – RPAS (i.e. one of four capability development priorities for the EC (European Council), as of December 2013) – Sweden leads one of the related projects, namely “MIDCAS” (MIDair Collision Avoidance System).

Moreover, Swedish Armed forces, support international missions in Afghanistan, Africa, Mali, Middle East etc.



Source: <http://www.forsvarsmakten.se/>

Nevertheless, in the aforementioned 2016-2020 Defence Plan, some SEK 1.3 billion, initially oriented towards the funding of international missions, will be reallocated for the funding of Armed Forces' training and readiness in accordance with their own suggestions.

As a consequence of the security deterioration at the European, as well as the international levels, the concept of Total Defence, consisting of Military and Civil defence, has turned to be an urgent demand for Sweden. This will incorporate common planning guidelines, between government and the relevant authorities. Moreover, through this, emphasis will be placed on national defence and planning for wartime scenarios.

In addition, of the highest priorities for the country, is the increase of operational warfighting capability, for preserving Swedish independence and autonomy. Towards this direction, a number of actions have been proposed by the Parliamentary Defence Commission (that reviewed the Armed Forces situation in 2013 and 2014), which amongst others include:

- Introduction of a new basic training system
- Upgrade of air defence capabilities
- Land forces reorganization into two mechanized brigades
- Increased presence in the Baltic sea and Gotland island (of vital strategic importance for Sweden)
- Home guards units increase
- Investments in soldiers' recruiting
- Civil defence invigoration
- Cyber security enhancement

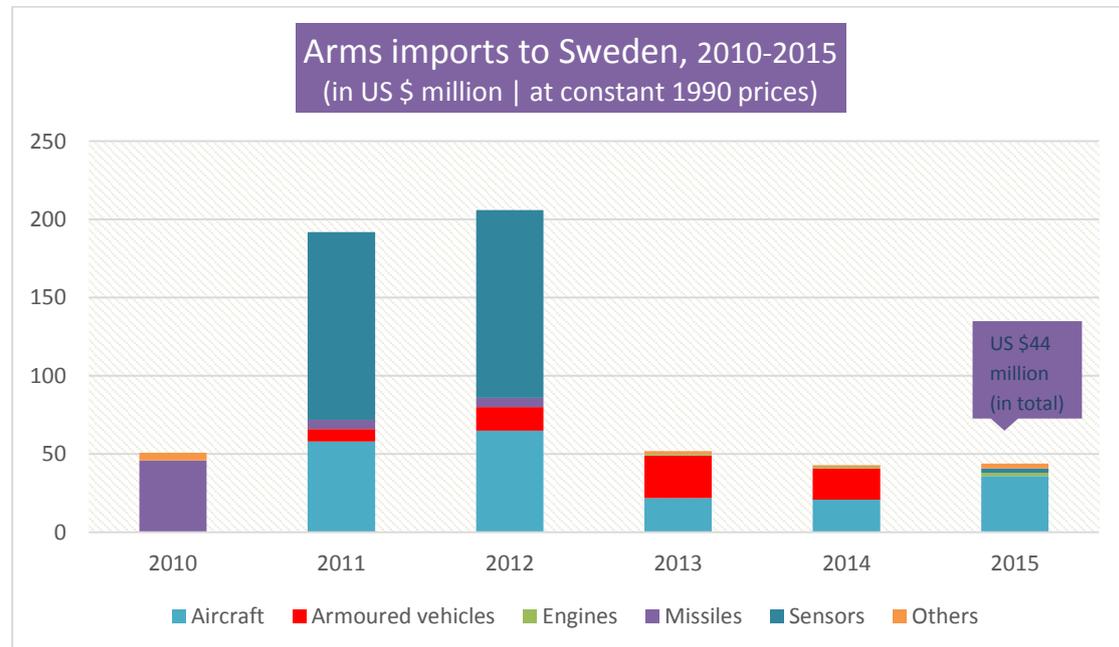
- Long range precision strike capability

For achieving the aforementioned, an increase of defence budget is fundamental, translated into approximately an extra SEK 17 billion (about US \$1.9 billion), in the budget of Armed Forces for the period 2016-2020, compared to the previous period.

Finally, Sweden has decided upon the upgrade/procurement of the below defence equipment over the period 2016-2020:

- Upgrade of main battle tanks and infantry combat vehicles
- New self-propelled artillery (Archer)
- Increase of bridge layers
- New antitank weapons
- Providing the Home Guard with 4 mortar platoons
- Upgrade of the two Gavle-class corvettes
- Air Defence: JAS39 investments (with Meteor missiles) & new short and medium range surface air missiles
- Anti-submarine warfare capability strengthening

According to SIPRI data, Sweden reduced its arms imports significantly in the last three years (2013-2015). The main imports of defence equipment over the period 2010-2015, included Aircraft, Armoured vehicles and Sensors (See chart below). In 2015, total arms imports by the country amounted to US \$44 million.



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

The main exporters of military equipment to Sweden over the same period, were the US, followed by France, Germany and Finland.



Swedish Defence Industry



SOFF

Swedish Security & Defence Industry Association

Sweden has managed to establish over the years a high-tech Defence Industry, with all of its companies currently (2016) being privately owned –more than 40% are foreign owned, with the US and the UK holding the lion’s share. According to

the Swedish Security and Defence Association (SOFF) –with currently over 80 member companies, including about 59 SMEs- the sector has a total annual turnover of approximately €3.5 billion and employs 33,000 people in Sweden. The large independence of the sector, has allowed Sweden to develop a defence industrial base that among others, covers system integration of fighter aircraft, submarines, surface vessels, infantry fighting vehicles, sensor and combat-management systems, as well as smaller components and IT systems to support the aforementioned.

In the last couple of years (2014-2015), a continued decline of actual exports has been noted. This can be attributed on the one hand to the reduced defence budgets of the ‘traditional’ customers of the Swedish defence industry, and on the other hand to the strict export control regulations that Sweden follows. As for the latter, despite the fact that this regulatory framework guarantees technology transfers with important partner countries such as the US and the UK, it ‘prohibits’ other countries that do not apply similar export control regulations, from entering the defence area.



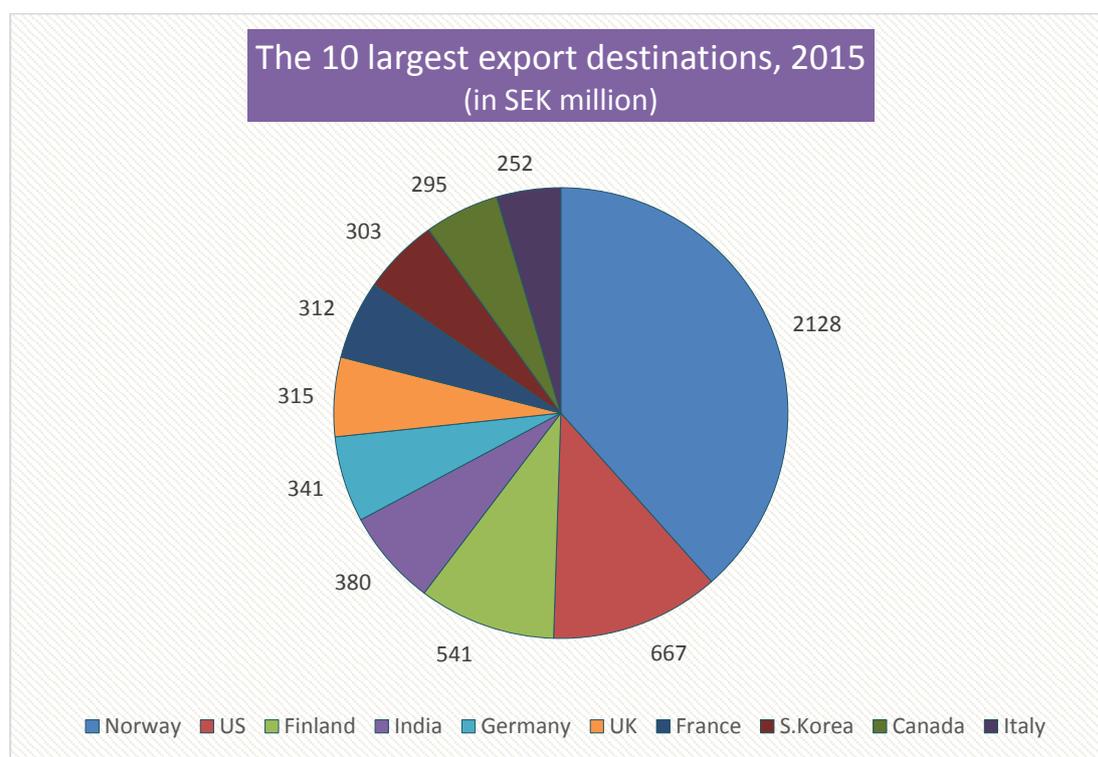
Source: <http://www.government.se/> & <http://isp.se/documents/>

In 2015, the Swedish Defence Industry total exports, decreased by almost 4% when compared to a year before (2014). These sort of ‘fluctuations’ in export results however, are

quite typical for the country, since Sweden’s defence exports have been dominated by large value exports (e.g. batches of aircraft or armoured vehicles). Moreover, taking into consideration that the related tenders from within the EU and also the US have been reduced significantly, this decreasing trend is expected to continue.

More specifically, in 2015, the military equipment exports of the country, were worth some SEK 7.7 billion. Of these, around SEK 1.1 billion was attributed to light weapons, components and ammunition exports, and a further SEK 143 million, to civilian firearms, parts and ammunition.

The largest export destinations for Swedish produced arms in 2015 (see chart below), were Norway, the US, Finland, India and Germany (See table below).



Source: <http://www.government.se/> & <http://isp.se/documents/>

The main types of items exported to the top-5 export destinations in 2015, are listed in the following table:

Country	Main type of exports
Norway	Combat Vehicle 90 (continued)
USA	Ammunition & marine subsystems
Finland	Anti-tank systems
India	Follow-on deliveries for previously exported army materiel, including ammunition, spare parts & components
Germany	Components for weapon systems, electronic systems & armour plating

Source: <http://isp.se/documents/>

The ten biggest Swedish exporters of defence materiel for 2015, are indicated in the below table:

10 biggest exporters 2015	
Exporting company	Value of exports
1. BAE Systems Hägglunds AB	2,300
2. Saab AB	1,852
3. Saab Dynamics AB	1,112
4. BAE Systems Bofors AB	460
5. FFV Ordnance AB	350
6. Norma Precision AB	260
7. SSAB EMEA AB	235
8. EURENCO Bofors AB	199
9. Nammo Vanäsverken AB	163
10. Saab Underwater Systems AB	103

Source: <http://isp.se/documents/>

According to the Swedish ISP (Inspectorate of Strategic Products), supplies of new and upgraded vehicles, as well as components for already delivered systems, will continue to contribute a significant amount to Swedish Arms export volumes. The sale of Gripen fighter (30 aircraft will be delivered by 2024) to Brazil, are expected to dominate the associated statistics post 2016.

At this point, it is worth mentioning that even before the signature of the contract with Brazil, Saab AB –representing more than 80% of the defence industrial capacities at the national level- was ranked in 37th position of the top 100 arms-producing companies according to the related SIPRI Fact Sheet for 2014, with US \$2.71 Billion of Arms sales. Introduction of the advanced Meteor missile, helmet-mounted displays and other technical adjustments, will port improved operational capacities to Gripen, the flagship product of Saab AB, and probably give rise to further analogous sales in the future.

Given the decrease of EU and US tenders, and the fear of losing its competitive advantage through the technology transfers required to enter new markets (e.g. see cases of sale of Gripen aircraft to Brazil, South Africa and Thailand), further investments in R&D seem essential for Sweden in order to sustain its position in the global defence market.

Swedish defence enterprises are considered R&D intensive; in 2015, the SOFF member companies invested about 17.8% of their total turnover to R&D. However, the technological development achieved within the sector, is not as significant as it was some decades ago. In a different perspective, technological breakthroughs appear more regularly in recent times in sectors such as IT, robotics, advanced materials, etc. In addition, the defence market, is highly unpredictable and does not allow for high profit margins today, with the emergence of cost-competitive Far East nations (e.g. China, South Korea) as major players in the domain.

Having realised that the technological driver nowadays is stronger outside the defence sector and the fact that pioneering technological advancements in the military sector could

also be generated in other parts of the world, Sweden seems more ready than ever before, to promote a different model for R&D funding. Through this, civil technological developments will be used to serve military applications too, rather than the opposite. Indicative is the fact that governmental funding for R&D in defence, has dropped from SEK 2 billion, to 600 million/annum, in the last decade (2005-2015).

Considering the aforementioned, it is essential to ensure the rapid dissemination and access to innovation and associated capabilities for the defence sector, and the continuation of investment in advanced technologies. Potential areas of such civil-defence capabilities integration, can be found in sensors' development, robotics, quantum information, neuroscience, artificial intelligence, cyber security and space-based systems.

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](#)

Reconfigurable PC-based simulation and training platform



A company with vast experience on customized hardware and software solutions, the development of avionics and other high-tech electronics systems and simulators, is proposing a Transfer of Technology collaboration with an expert in modeling, simulation and training solutions, via which a cost-effective turnkey solution for a reconfigurable/adaptable training and simulation platform will be established. The PC-based software platform to be developed will be applicable

across a multitude of domains, such as training, research & development, operations analysis, and entertainment. Additionally, the platform will enable simulation developers and training instructors to create, modify, manage and deploy any simulation-based content (such as aircraft, cars, ships, air traffic control tower, weapons, eLearning material, and more) while providing end users with the effective and efficient training needed to operate the associated complex platforms.

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

Mail at: a-kintis@epicos.com

Establishment of Chemical Laboratory capability



A company excelling in the area of Non-destructive Testing (NDT) is willing to expand its capabilities in special services (Special Processes - Chemical Laboratory) that will complement the production chain, attending to the growing demand for the manufacturing of efficiently machined and post-processed aeroparts.

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

Mail at: a-kintis@epicos.com

News from our A&D Business Network

BAE Systems contracts Czech firm VOP CZ for military vehicle components



BAE Systems has issued a contract to the Czech company VOP CZ to produce components for BvS10 armored all-terrain vehicles. The contract further builds on an existing teaming agreement between the two companies aimed at providing the Czech Republic with its next generation Infantry Fighting Vehicle (IFV). BAE Systems and VOP CZ signed an agreement in 2016 to combine efforts to replace the Czech Republic's fleet of BMP-2 IFVs, and intend to offer the CV90 IFV. The CV90 is an advanced, adaptable, combat proven vehicle with more than 1,200 operating with seven nations, including several NATO allies.

BAE Systems is committed to a strong partnership with Czech industry to offer the best capabilities possible to meet the security needs of the country, and it has a solid track record of working with industries native to its customers to support local economies. Under this new contract signed in February, VOP CZ will produce parts for the 32 BvS10s that BAE Systems Hägglunds, based in Örnsköldsvik, Sweden, is currently building for the Austrian government under a previous contract awarded in June 2016.

"This contract is a milestone in our cooperation with Czech industry and the first step toward a comprehensive and lasting relationship with VOP CZ," said Peter Nygren, vice president of business development at BAE Systems. "This order is an excellent opportunity to establish working processes and relationships between the two companies well in advance of the far more extensive cooperation required for the BMP-2 replacement program. Should the Czech Republic select the CV90, our arrangement will be well positioned to successfully carry out the program while also benefiting the Czech Republic's defense industry and economy."

The industrial solution with VOP CZ for the BMP-2 replacement program will support job creation and technology transfer in the country. This initial contract demonstrates BAE Systems' comprehensive approach to industrial cooperation. The agreement with VOP CZ and its engineering and integration expertise creates a strong team for supporting the Czech Armed Forces for many years to come.

"Developing cooperation with a major foreign defense company is an important part of our company business strategy," said Marek Špok, director of state enterprise at VOP CZ.

For Further Information [Click Here](#)

Leonardo and Hensoldt Sign Agreement to Offer Secure 'Mode-5' Friend-or-Foe Systems to the Worldwide Market



Leonardo has signed a Memorandum of Understanding with Hensoldt (the new name for Airbus DS Electronics and Border Security) to offer Mode-5 IFF (Identification Friend or Foe) solutions to customers around the world. This collaboration between two European leaders in defence electronics technology shows how, by joining forces, the team can position itself as market leader for cutting-edge new requirements. The two companies, working together as "Team Skytale", have already been selected as preferred bidder by the UK Ministry of Defence to upgrade IFF systems on more than 400 land, sea and air vehicles.

IFF technology allows operators to electronically identify friendly forces, distinguishing them from potential enemies. It does this by sending out an interrogation signal to unidentified platforms and verifying the automatic responses that are sent back, effectively a modern-day challenge and password system. Ensuring that ground, air and naval crews can reliably recognise their compatriots is one of the main ways of avoiding 'friendly fire' incidents. In 2020, all NATO nations are mandated to switch over to the new, more-secure 'Mode-5' version of the technology and other nations looking to operate alongside NATO forces will also need to be able to interact with the new standard. Mode-5 uses the latest cryptographic techniques to avoid the threat of deception by adversaries.

Leonardo and Hensoldt can offer a comprehensive product portfolio and integration expertise capable to satisfy any customer needs and, notably, are the only companies outside of the United States to be able to offer a cryptographic computer or 'crypto' that meets the US Department of Defense AIMS 04-900(A) Option B control standard, making Team Skytale's European solution readily exportable to a wide range of potential international customers. Nations which the team will be approaching include those who intend to upgrade their systems to the new Mode-5 standard to allow inter-operation with NATO forces. Team Skytale will be looking to Europe, the Middle East and Far-Eastern nations as potential customers. Leonardo has emerged over the last year as an international leader in IFF technology, particularly in modern, Mode-5-compatible equipment such as the M428 IFF Transponder and the SIT2010 Crypto device, and offers a wide portfolio of IFF interrogators suitable for different platform types.

In the UK, Leonardo has previously delivered Mode-5 IFF for the Royal Navy's Queen Elizabeth Class aircraft carriers and the Royal Air Force's Eurofighter Typhoons, while in Italy Leonardo is providing Mode-5 IFF for the NH90 helicopter. Internationally, the company provides Mode-5 IFF technology for the Saab Gripen-E fighter and other worldwide Armed Forces. Looking at future IFF technologies, the company has already demonstrated reverse-IFF (air-to-ground) capabilities with the Italian Air Force on its Eurofighter Typhoon aircraft and is currently studying the benefits of E-Scan IFF for future Typhoon aircraft

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Teledyne Awarded \$10 Million Contract to Supply Infrared Detectors for Mission to Jupiter

Teledyne Technologies Incorporated announced today that its subsidiary, Teledyne Scientific & Imaging, LLC (TS&I), was awarded a \$9.98 million contract from the French Space Agency, the Centre National d'Études Spatiales (CNES), to provide infrared detectors and electronics for the European Space Agency (ESA) JUICE mission to Jupiter. JUICE is expected to launch in 2022 and reach Jupiter in 2030 to undertake a three and a half year study of Jupiter and three of its moons: Callisto, Ganymede and Europa. Teledyne will deliver infrared detectors and focal plane electronics to the Institut d'Astrophysique Spatiale (IAS) for use in the MAJIS instrument that IAS is developing for the JUICE mission. MAJIS, one of ten instruments in the JUICE science payload, will study the composition of Jupiter's atmosphere and the surfaces of Jupiter's satellites using two spectral channels that operate in the visible – near infrared (0.50 to 2.35 micron wavelengths) and mid-infrared (2.25 to 5.20 micron wavelengths).

The infrared detectors for this mission, Teledyne's H1RG 1024×1024 pixel arrays, are a proven technology. Similar detectors are on several space missions including the Hubble Space Telescope, the WISE all-sky infrared survey, the Orbiting Carbon Observatory and the OSIRIS-REx asteroid rendezvous mission. The focal plane electronics are based on Teledyne's SIDECAR ASIC that is used by several space missions including the Hubble Space Telescope, the James Webb Space Telescope and ESA's Euclid dark energy mission. Teledyne plans to deliver the detectors and electronics within 24 months.

"Teledyne is proud to be a partner in the MAJIS instrument and contribute to the success of ESA's JUICE mission," said Robert Mehrabian, Chairman, President and Chief Executive Officer of Teledyne. "This mission exemplifies Teledyne's commitment to exploration and discovery, from the ocean floor to deep space."

For Further Information [Click Here](#)

Source: Epicos, Teledyne

Orbital ATK Technologies Support Delta IV Launch of WGS-9 Spacecraft

Orbital ATK, a global leader in aerospace and defense technologies, provided propulsion, composite and spacecraft technologies to enable the successful launch of both the United Launch Alliance (ULA) Delta IV rocket and the ninth Wideband Global SATCOM (WGS-9) satellite that was launched Saturday from Cape Canaveral Air Force Station, Florida.

“Orbital ATK’s is proud to contribute a number of key technologies to ULA’s Delta IV launch vehicle,” said Scott Lehr, President of Orbital ATK’s Flight Systems Group. “A launch like this one clearly demonstrates the breadth of our product lines in the launch and satellite sectors.”

Both the satellite and Delta IV launch vehicle use cutting-edge technologies from multiple Orbital ATK facilities. For the WGS-9 satellite, Orbital ATK produced both loop heat pipes and standard heat pipes, which provide payload, spacecraft bus and battery thermal management, at its Beltsville, Maryland, facility. Additionally, Orbital ATK manufactured the payload pallet boom tubes at its Magna, Utah, location and the payload module at its San Diego, California, site.

For the Delta IV rocket, Orbital ATK provided four 60-inch diameter Graphite Epoxy Motors (GEM-60). The 53-foot-long solid rocket boosters burned for 90 seconds and provided more than 1.1 million pounds of thrust, more than the combined thrust of four 747 jet aircraft. Orbital ATK produced the solid rocket motors at its Magna, Utah, facility, where it has manufactured 84 GEM-60s in support of the 36 Delta IV launches since the initial flight in 2002.

In addition to the GEM-60 propulsion, Orbital ATK supplied a combined eighteen Delta IV and GEM-60 key composite structures, which provide lower weight and higher performance. The largest composite structures are five meters in diameter, range from one to fourteen meters in length, and are produced using either advanced wet winding or hand layup, machining and inspection techniques at Orbital ATK’s manufacturing facilities in Iuka, Mississippi, and Clearfield, Utah.

Orbital ATK also manufactured the propellant tank for the Delta IV upper stage roll control system at the company’s Commerce, California, facility, and it designed and manufactured the nozzles for Delta IV’s RS-68A liquid engine and GEM-60 solid motors at its Promontory, Utah, facility. Orbital ATK also designed and produced the nozzle’s thermal protection material, which is capable of shielding the nozzle from the extreme heat of launch, when external temperatures can exceed 4,000 degrees Fahrenheit.

The WGS-9 satellite is part of a larger system that increases military communications capabilities for U.S. and allied forces deployed worldwide. As the backbone of the U.S. military’s global satellite communications, WGS provides flexible, high-capacity communications for the Nation’s warfighters through procurement and operation of the satellite constellation and the associated control systems. WGS provides worldwide flexible,

high data rate and long haul communications for marines, soldiers, sailors, airmen, the White House Communication Agency, the US State Department, international partners, and other special users.

For Further Information [Click Here](#)

Source: Epicos, Orbital ATK

AAR Signs Landing Gear Contract with IndiGo, a Low-Cost Airline in India

AAR, a global leader in aviation aftermarket services, has signed an agreement with India's largest airline, Interglobe Aviation Limited ("IndiGo"), to provide support for landing gear overhaul services. The contract includes up to 49 full ship sets of A320 landing gear, as well as assemblies and subassemblies, for the next five years.

The agreement expands AAR Landing Gear Services' footprint in the Asia-Pacific region and spearheads a relationship with the growing low-fare carrier, which AAR currently supports through exclusive components upon request. IndiGo currently operates 129 aircraft, which fly to 42 domestic and five international destinations.

AAR Landing Gear Services delivers comprehensive and cost-effective landing gear, wheels and brakes solutions to more than 40 commercial and military aircraft types, narrow-body and wide-body, at its state-of-the-art Miami facility. Services include everything from complete overhauls to minor repairs, component machining, plating and painting. AAR maintains a complete inventory of OEM parts, wheels, brakes and accessories. AAR also offers on-wing service and deploys Tiger Teams to handle on-site situations around the world.

"We are honored to win the trust of IndiGo team to perform the important landing gear overhauls and exchanges," said Rahul Shah, AAR Senior Vice President, Strategic Growth and Business Development, Asia Pacific, Middle East and Africa. "Our quick turnaround times are one of the reasons we've landed several maintenance and repair contracts with low-fare and regional carriers in the past few months."

"Our landing gear team takes pride in our global agility," said Scott Ingold, Vice President and General Manager, AAR Landing Gear Services. "We are eager to extend our value proposition to a key player in one of the most important aviation markets in the world today."

IndiGo's Chief Aircraft Acquisition & Financing Officer, Mr. Riyaz Peermohamed, said: "IndiGo prides itself on its on-time performance and technical dispatch reliability. AAR's global presence and quick turn-around times will help IndiGo to continue to maintain its global standards and customer expectations."

For Further Information [Click Here](#)

Source: Epicos, AAR

Revision Awarded U.S. Army Next-Generation ACH Helmet Contract

Revision Military, the world leader in integrated head systems, has been awarded the U.S. Army's Advanced Combat Helmet Generation II (ACH GEN II) helmet contract. This five-year indefinite delivery, indefinite quantity (IDIQ) helmet contract (W91CRB-17-D-0008), awarded on a full and open competition basis to Revision, has a maximum value of \$98,111,803 and estimated completion date of March 6, 2022. Revision's ACH helmet solution is up to 24 percent lighter than the legacy ACH helmet system and this contract represents the first large-scale, significant advancement in ACH technology in 15 years.

Since last contracted by the U.S. Army in 2012—when Revision delivered a total of 180,000 ACH helmets—Revision has invested millions of dollars in new manufacturing equipment and processes, research into the characterization and optimization of advanced ballistic materials, and in the building of a world-class team of scientists and engineers in order to evolve the Company's capabilities. Additionally, since 2013, Revision's Newport, Vermont facility—where helmets for this contract will be manufactured—has expanded by 16,000 sq. ft., and the number of employees that work at this facility has more than doubled. As a result of these ongoing investments, and the development of composite materials technological expertise, Revision was able to exceed the weight reduction requirements stipulated in the Army's solicitation by a sizable margin: The ACH Gen II solicitation required a minimum 15 percent weight reduction compared to the current ACH helmet; Revision's solution offers up to 24 percent weight reduction over the legacy ACH design, pushing the envelope of attainable weight reduction while maintaining superior ballistic protection.

Revision is dedicated to re-envisioning military head systems with integrated technologies that feature new, cutting edge materials, in a variety of designs and configurations, to exceed all customer requirements. With extensive knowledge of ballistics, electronics, optics, power, and other innovative technologies, Revision is a creative solutions provider, capable of designing and developing custom head protection solutions to meet the changing needs of global militaries.

"With this solicitation, PEO Soldier challenged the helmet industry, raising the technology bar substantially. Revision answered in a big way, dedicating significant resources to set a

new standard for lightweight helmet design and performance,” said Jonathan Blanshay, CEO. “Revision has been a proud U.S. Army supplier since 2005, and our investment in this program epitomizes Revision’s unwavering dedication to forward-thinking head systems technology and manufacturing. In the years since Revision was last contracted by the U.S. Army, we’ve become a much stronger company and head systems technology innovator, securing helmet contracts around the world—including for the British Army’s VIRTUS program—and emerging as the vanguard of the U.S. helmet industry. We’re excited to provide this cutting-edge technology to troops in the field who will benefit greatly from the improved performance and significantly lower weight of this next-generation head system. In short, Revision has fully modernized the traditional ACH helmet, bringing this crucial equipment up to speed with the fast pace of modern warfare.”

“This was an intense competition that draws on the reliability and skill of Revision Military’s workforce in Vermont,” said Senator Patrick Leahy (D-Vt.). “The quality of these helmets will protect soldiers from ballistic impacts, while also making them more comfortable with their up to 24% lighter build. Like all Vermonters, I am incredibly proud of the men and women at Revision Military Newport for their hard work and dedication, both of which greatly contributed to Revision being selected for this contract. In past visits to the facility, I have seen firsthand the commitment these employees have to their trade, a commitment depended on by the men and women of our Armed Forces.”

Over Revision’s history, the Company has delivered 1.1 million helmets to the U.S. military, with an additional 300,000 helmets internationally. Across all of these program deliveries, Revision has never received a single warranty claim for product malfunction or defect, has never had to recall a single faulty product, and has never failed a single Lot Acceptance or First Article test. Revision is also the most experienced and most knowledgeable Ultra-High-Molecular-Weight Polyethylene (UHMWPE) manufacturer in the industry. With robust design and development expertise, significant investment in efficient, high-volume manufacturing, and vertical integration, Revision stands ready to meet this U.S. Army’s demand, and will use the revenue generated through this program to continue to build capabilities and advanced innovations to benefit the U.S. military for years to come.

For Further Information [Click Here](#)

Source: Epicos, Revision

Embraer Flies Fourth E190-E2 Prototype and Advances in the Certification Campaign

Embraer performed last Friday afternoon, at the São José dos Campos facility, the maiden flight of the E190-E2 fourth prototype, which was completed in two hours. This aircraft will be used for specific interior tests such as cabin evacuation, environmental comfort and internal noise.

The aircraft, serial number 20.004, will join the flight-test fleet, comprised of the first three E190-E2 prototypes, which combined, have accumulated more than 650 flight hours to date. The first E190-E2 jet is on schedule to be delivered in the first half of 2018 and the launch operator will be Widerøe, the largest Norwegian regional airline.

“In terms of the certification campaign, Embraer has already frozen the aerodynamic configuration and concluded many tests such as flying qualities assessment, short field takeoff and landing, climb performance, in-flight thrust determination, landing gear stability and other systems tests. Shortly we will do high speed flying qualities, flutter, natural ice and cold soak tests,” explains Luís Carlos Affonso, COO, Embraer Commercial Aviation.

In addition to the flight test campaign, Embraer is performing more than 30,000 hours of ground tests as well as integration analysis. With the goal of delivering a more mature airplane upon entry into service, the Company uses an Iron Bird, where all aircraft systems are available in full scale, including the cockpit. This tool enables Embraer to simulate flights of each E2 model and to optimize systems performance and refine flight qualities.

For Further Information [Click Here](#)

Source: Epicos, Embraer